

Oak, Spring Garden Library



THE EFFECT OF FLOWERS ON THE OUTSIDE OF A HOUSE.

(vide page 27.)

Mr. Thorold
from James Mangles
Oct. 27. 1839

THE
FLORAL CALENDAR,
Monthly and Daily.

WITH MISCELLANEOUS DETAILS RELATIVE TO
Plants and Flowers,
GARDENS AND GREENHOUSES,
HORTICULTURE AND BOTANY,
AVIARIES, &c. &c.

COMPILED, SELECTED AND ARRANGED BY
JAMES MANGLES,
COMMANDER R.N.

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MDCCCXXXIX.

A protracted illness, accompanied with intervals of fluctuating debility and lowness of spirits, together with a total ignorance of Botany, it is hoped will plead in extenuation for this culpably long list of

"ERRATA, ET CORRIGENDA."

pg. line.

- viii. 15, Convolvulus *rd.* Convolvulus
- ix. 16, Muschatus *read* Moschatus.
- xiii. 15, convolvulus *rd.* convolvulus.
- xvi. 2, Aurantica *read* Aurantiaca.
- xvi. 11, Muschatus *read* Moschatus.
- 4, 21, oppositifolia *read* oppositifolia
- 31, acuminata *read* acuminata.
- 6, 8, Alysson *read* Alyssum.
- 8, 53, rhombeum *read* rhombea.
- 56, latifolia *read* latifolia.
- 10, 10, Guedres *read* Guelder.
- 46, cottonaster frigidea *read* co-
toneaster frigida.
- 49, Esculus *read* Aesculus.
- 51, Nemophilla *read* Nemophila.
- 12, 19, Holyhock *read* Hollyhock.
- 12, 39, grandiflora *read* grandiflorus
- 40, speciosum *read* speciosus.
- 41, ovatum *read* ovatus. [sus
- 42, glandulosum *read* glandulo-
- 43, venustum *read* venustus.
- 44, Russellina *read* Russelliana.
- 45, Nipalensis *read* Nepalensis.
- 14, 31, Macrocarpa *r.* „ Macrocarpa
- 16, 27, Androsacena *rd.* Androsaceus
- 18, 31, Elichrysium *read* Elichrysom.
- 20, 11, Dabeoct *read* Dabœcia.
- 12, Capifata *read* Capitata.
- 24, 26, Leschenaultea *r.* Lechenaultia
- 29, 30, Gypsie *read* Gipsy.
- 31, 12, Sagitaria *read* Sagittaria.
- 34, 6, Melendris *read* Melindri.
- 36, 14, Elex *read* Ulex.
- 39, 8, phyllicaulis *read* filicaulis.
- 49, arranana *read* arraniana.
- 50, Elscholtzia *read* Eschxholtzia
- 24, reflexu *read* reflexa.
- 27, atropicifolia *rd.* atriplicifolia
- 29, Enethera *read* Enothera.
- 31, psittacinus *read* psittacinus.
- 63, gargania *read* garganica.
- 33 & 29, Enethera *r.* Enothera.
- 41, 17 & 46, Nemophilla *read* Nemo-
phila.
- 39, Clabanthus *read* Cladanthus.
- 43, Goodetia *read* Godetia.
- 42, 8, Wheeleris *read* Wheeleriana.
- 9, Browni *read* Brownii.
- 11, jacobeus *read* jacobœus.

pg. line.

- 42, 12, Sabina *read* Sabini.
- 13 & 30, grandiflora *read* grandi-
florum.
- 14, 15, & 20, Antirrhinum *read*
Antirrhinum.
- 18, Sellowi *read* Selloviana.
- 26, crinensis *read* chinense.
- 27, Flora *read* Phlox.
- 28, phyllicaulis *read* filicaulis.
- 38, Istoma *read* Isotoma.
- 39, dispotosa *read* cœspitosa.
- Beauverdia *read* Bouvardia.
- 42, Bouverdia *read* Bouvardia.
- 43, 2 & 3, Anagalis *read* Anagallis.
- 2, Sellowi *read* Selloviana.
- 3, arranana *read* arraniana.
- 5, grandiflora *rd.* grandiflorum.
- macrapa *read* macrocarpa.
- 6, Drumondii *read* Drummondii
- 7 & 16, Antirrhinum *read* An-
tirrhinum.
- 8, melendris *read* melindris.
- 9, Esholtzia *read* Eschscholtzia.
- 12, crinensis *read* chinense.
- 15, phyllacaulis *read* filicaulis.
- 19, ratifolia *read* latifolia.
- 21, taraxifolia *read* taraxafolia.
- 22, Merembergia *r.* Nierembergia
- 28, Petuntias *read* Petunias.
- 29, axilaris *read* axillaris.
- Senecia *read* Senecio.
- 30, Nierembergia *r.* Nierembergia
- 33, arranania *read* arraniana.
- linarifolia *read* linearis.
- 45, Glosinias *read* Gloxinias.
- 46, Sparasis *read* Sparaxis.
- Arethusia *read* Arethusa.
- 24, Caris *read* Cereus.
- 48*, 54, Leptospermum *read* Lepto-
permum.
- 55, Hyperium *read* Hypericum.
- 49, Tenerinum *read* Tenerium.
- 3, Banera *read* Bruera.
- moutan *read* montan.
- 6, Anthyllis *read* Anthyllis.
- 51, 23, Iantha *read* Ianthe.
- 34, Domtesse *read* Comtesse.
- 52, 21, Province *read* Provence.
- 59, 26, Palnuri *read* Palmeri (qy.)

PREFACE.

IN the following desultory pages an attempt, has been made to collect together some of the most useful and practically available information relative to Gardening and the Green-house, Horticulture and Botany, &c., which could be gleaned from the numerous periodical works on Floriculture, which have had within the last few years so extensive a circulation; some of the notices are written by the compiler; for instance, that "On the pleasures of gardening," and likewise the paper "On the advantages of using 'American shrubs' profusely in gardens, &c." "The projected conservatory or hot house for Epiphytes, &c. to be attached to a morning room." All the articles are much abridged, and nothing is set down but what appeared likely to be *useful to some class or other of amateurs.*

In the metropolis and its vicinity, as well as in other large towns, there are many persons who *would* cultivate a small garden, and derive both health and pleasure in the pursuit, but who are deterred from the attempt because, *not possessing any knowledge of the subject,*

they could only do so, by employing a gardener, which would considerably increase the expense, and frustrate all the advantages which would result from a personal cultivation of the ground. It is principally for the use of such that this little work is designed; in which the writer has endeavoured to compress the pith and condensed substance of such information, as he three years since, so much needed in his first attempt at gardening, on coming into the occupation of his present residence; by its assistance, it is hoped, any lover of flowers may safely undertake the management of a small garden with some reasonable prospect of success.

The difficulties which beset the amateur florist in London are great and almost irremediable; day and night he has to contend incessantly with a poisonous atmosphere—no skill or art—no assiduity or care—will protect his plants from the destructive infection of the pernicious “*blacks*”; their withering influence will baffle all his precautions—none of his herbaceous plants, (no matter what may have been their cost), will ever flower in health a second year, and his annuals will seldom, if ever, assume a healthy appearance or a perfect floration; even a languid and “*mezzo tinto*” display can only be obtained by dint of great care and unremitting attention; to obviate these disadvantages, it is advisable to contract for a *perpetual weekly supply*, fresh and vigorous from the nursery, brought in pots and either plunged in their own pots or transplanted, and in such robust health

as to be able to contend for a few weeks with the contagious atmosphere of London; and though disease and decay must and will commence from the *very moment these plants are received*, still having been introduced in strong and robust condition, they will have "stamina" enough to maintain a very fair display of bloom during the usual period of their floration, and "*once a week*" the contractor will take care to remove the sickly and faded plants, replacing them by others in health and vigour.

By these means the desponding amateur may enjoy a spice of the "*Rus in urbe*;" and if it is unaccompanied by classical associations "*Recubans sub tegmine fagi*," still he may create in front of his windows a florid and glowing scene—a tessellated surface of enamelled hues, whose dazzling splendour, while refreshing his sight and cheering his senses, may assist to reconcile him to his doom of being an urban, and not a *sub-urban* resident.

N.B. The person who undertakes the contract to supply a garden or green-house, will always send for "*one entire day in each week*," in London, an *experienced gardener* to prune, water, remove the dead plants and replace them by fresh, and to keep all in "*good order*."

To Dr. LINDLEY, N. B. WARD, Esq., W. YARRELL, Esq., and D. DON, Esq., of the *Linnean Society*, the writer presents his acknowledgments for their very kind assistance, and for their very valuable communications.

66, Cambridge Terrace,
Victoria Gate, Hyde Park.
August, 1839.

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FLORAL
CALENDAR.

MONTHLY FLORAL CALENDAR.

FEBRUARY, XXVIII.

SPRING.

FLOWER GARDEN.

Snowdrop	Galanthus Nivalis
Mezereon	Daphne Mezereon
Coan Sowbread	Cyclamen Coum
Wild Primrose	Primula vulgaris
Violets	Viola odorata
Lapland Diapensia	Diapensia Lapponica
Spring Bulbocodium	Bulbocodium vernum
Fringed Star of Bethlehem	Ornithogalum Fimbriatum
Siberian Squill	Scilla Sibirica
Two-leaved Squill	Scilla bifolia
Herbaceous Heath	Erica Carnea
Dahurian RoseLaurel	Rhododendron Dahuricum
Hepaticas	Hepatica Triloba

Chimonanthus Fragens
Armeniaca Sibirica

GREEN HOUSE.

Camellia
Narcissus
Cineraria
Azalea Phœnicea
„ Alba Pink
Dilwynia Cinerascens
Epacris Nivalis
„ Variabilis
Correa Pulchella
Scottia Dentata
Erica Abietina
„ Verticillata

DAILY FLORAL CALENDAR.

FEBRUARY, XXIX.

SPRING.

- 1 F Uncover Tulip and other beds whenever it is mild, covering again in frost.
- 2 S Put plants in pots out in the sunshine for an hour or two, if mild and dry
- 3 S
- 4 M If not yet done, top dress Auriculas, with compost prepared for the purpose
- 5 T Top dress Polyanthuses with a compost of light maiden soil mixed with horse dung
- 6 W Bring in Roses in pots into the forcing house, to flower in the middle of April
- 7 T Continue to bring in Hyacinths in pots into the forcing house, if wanted for early flowering
- 8 F Continue to force Pinks, to succeed those brought in on the 10th of January
- 9 S Force Carnations to succeed those brought in on the 11th of January
- 10 S
- 11 M Sow Mignonette for succession, in boxes, in light sandy soil, on a slight hot-bed
- 12 T Sow ten weeks Stocks for succession, in pots or boxes, and sink them in a hot-bed
- 13 W Sow Dahlia seed in pots, and sink them in a hot-bed, when new sorts are required
- 14 T Prick out in pots, or in light sandy soil, young Tulips that were sown last year
- 15 F If not done last month, plant dried roots, as Anemones, in borders, if mild and dry
- 16 S Prepare composts, manures, and mixed earth for dressing borders and beds
- 17 S
- 18 M Dig and dress flower borders, taking care not to disturb any of the roots
- 19 T Divide the roots, and plant hardy Biennials and Perennials, if mild and dry
- 20 W Destroy worms, slugs and snails whenever they appear, as after a shower
- 21 T Attend to neatness, by sweeping and rolling the garden walks
- 22 F Remove all dead or withered leaves, and plants killed by the frost
- 23 S Sow some of the hardier Annuals, such as dwarf Larkspur, in open borders
- 24 S
- 25 M Sow a few of the tenderer Annuals, such as Schizanthus, on a slight hot-bed
- 26 T If not yet done, clear out carefully and sort seeds, for use next month
- 27 W Continue to protect Tulip and other beds, with matting, layers of leaves, &c.
- 28 T Sow Auriculas and Polyanthuses in pans or boxes, and protect them from frost

MONTHLY FLORAL CALENDAR.

MARCH, XXXI.

FLOWER GARDEN.

Spring Sowbread	Cyclamen Vernum
Eastern Henbane	Hyoscyamus Physaloides
Vernal Adonis	Adonis Vernalis
Daffodils	Narcissus, many species
Van Thol Tulip	Tulipa Suaveolens
Small Periwinkle	Vinca Minor
Fritillary	Fritillaria Meleagris
Crown Imperial	Fritillaria Imperialis
Dog's-tooth Violet	Erythronium Dens Canis
Hyacinths	Hyacinthus Orientalis
Cornelian Cherry	Cornus Mascula
Dwarf Almond	Amygdalus Nana
Blackthorn	Prunus Spinosa
Japan Plum	Prunus Japonica
	Helleborus Odorus
	Sisyrinchium Grandiflorum
	Prunus Sibirica
	„ Cerasifera
	Soldanella Montana
	Saxifraga Oppositifolia
	Viburnum Tinus Lucida
	Cratægus Purpurea

GREEN HOUSE.

Camellia
Cineraria
Narcissus
Rhododendron
Justicia
Amaryllis
Erica Acuminata
„ Depressa
Muraltia Stipulacea
Eutaxia Myrtifolia
Acacia Armata
Pultenæa Stricta
Kennedia Marryattæ
„ Monophylla

SPRING.

DAILY FLORAL CALENDAR.

MARCH, XXXI.

1 F	Examine Tulips, and remove leaves or parts of the bulb that may be cankered
2 S	If not yet done, plant Ranunculuses without delay, as directed in November
3 S	
4 M	If not yet done, plant Anemones without delay, as directed in November
5 T	Force Roses the last time, to flower in May, before the open ground succession
6 W	Force Pinks the last time, to succeed those brought in on the 8th of February
7 T	Force Carnations to succeed those brought in on the 9th of February
8 F	If not done, top dress Auriculas without delay, with compost for the purpose
9 S	If not done, top dress Polyanthuses without delay, as directed 5th of February
10 S	
11 M	Sow Auriculas and Polyanthuses in pans or boxes, and water occasionally
12 T	If mild, sow hardy Annuals, as Candy Tuft, Larkspur, &c.
13 W	Plant Tiger Flowers and Meadow Saffron, to flower in Autumn
14 T	Sow on a hot-bed, Convolvulus, Balsams, China Asters, &c.
15 F	Destroy worms, slugs, and snails, whenever they appear, as after a shower
16 S	Hand-pick or hoe up weeds as soon as they appear through the ground
17 S	
18 M	Pot Dahlias and put in a frame to bring them forward before planting
19 T	Thin Mignonette sown in the preceding months, and give plenty of light
20 W	Thin ten weeks' Stocks sown in the preceding month, and sow for succession
21 T	Pot Carnations laid last year, for flowering, with mould prepared for the purpose
22 F	Divide the roots, and plant hardy Biennials and Perennials, if mild and dry, and water
23 S	Dig and dress flower borders, taking care not to disturb any of the roots
24 S	
25 M	Collect composts, manures, and mixed earths for dressing borders or beds
26 T	Continue to protect tender roots from frost at night, by mats, straw, &c.
27 W	Remove dead or withered leaves, and plants killed by the frost or slugs
28 T	Attend to neatness, by sweeping and rolling the walks every 6 or 7 days
29 F	Mow grass-plats when wanted; water with lime water if worms appear
30 S	Transplant Annuals, if sufficiently advanced, into their final places
31 S	

SPRING.

MONTHLY FLORAL CALENDAR.

APRIL, XXX.

FLOWER GARDEN.

Wall Flower	Cheiranthus Cheiri
Hyacinth	Hyacinthus Orientalis
Cowslip	Primula Veris
Pasque Flower	Anemone Pulsatilla
Yellow Tulip	Tulipa Sylvestris
Gentianella	Gentiana Acaulis
Yellow Alysson	Alysson Saxatile
Spring Snow Flake	Leucjum Vernum
Primrose Peerless	Narcissus Biflorus
Sweet Bay	Laurus Nobilis
Spring Crocus	Crocus Vernus and others
Bulbocodium	Ixia Bulbocodium
Swedish Dogwood	Cornus Suecica
Common Almond	Amygdalus Communis
Cherry	Prunus Cerasus
Bird Cherry	Prunus Padus
Common Laurel	Prunus Laurocerasus
Black Hawthorn	Crataegus Nigra
Snowy Mespilus	Amelanchier Botryapium

Ribes Sanguineum
 " Aureum
 Lonicera Cœrulea
 Berberis Repens
 " Aquifolia
 " Glumacea
 " Fascicularis
 Spiraea Taurica
 Phlox nivalis
 Iris Tuberosa
 Crataegus Heterophylla
 Pyrus Salicifolia

GREEN HOUSE.

Cineraria
 Rhododendron
 Camellia
 Azalea Red
 Erica
 Rose China
 Narcissus
 Rose Sweet China
 Azalea Alba
 Eriostemon Salicifolia
 Brachysema Latifolia
 Pultenaea Subumbellata
 Acacia Pulchella
 Hovea Celsi
 Epacris Paludosa
 " Pulchella
 Polygala Oppositifolia
 " Cordifolia
 Rhodanthe

SPRING.

DAILY FLORAL CALENDAR.

APRIL, XXX.

- 1 M Give plants in pots fresh earth, and if root-bound put them in larger pots
- 2 T Search carefully over buds of Roses for caterpillars, and destroy them
- 3 W Put plants in pots as much out of doors as possible and water plentifully
- 4 T Sow hardy Annuals, for succession, as Candy Tuft, Larkspur, &c.
- 5 F Sow Biennials, as Wall-flower, Foxglove, Sweet William, Brompton Stock, &c.
- 6 S Sow Perennials for flowering next year, as Columbine, Scarlet Lychnis, &c.
- 7 S
- 8 M Let plants in the green house have as much air as possible if the weather be mild
- 9 T Pot Carnations laid last year, for flowering, with mould for the purpose
- 10 W Separate off-sets of Perennials and Biennials, plant slips, and water well
- 11 T If not yet done, pot Dahlias, and set in a frame to forward them for planting
- 12 F Wash Roses and other flowers with Tobacco tea, to destroy aphides
- 13 S Pot Tuberose in light rich soil, one root in each, and sink in a hot-bed
- 14 S
- 15 M Expose ten weeks Stocks sown 10th of February to the air as much as possible
- 16 T Expose the Mignonette sown 10th of February to the air, covering if frosty
- 17 W Transplant Annuals, if sufficiently advanced, to their final situations
- 18 T Stir the earth well amongst flowers, in the borders and beds
- 19 F Attend to neatness by sweeping and rolling the garden walks
- 20 S Water abundantly transplanted flowers, and particularly seedlings
- 21 S
- 22 M Remove all dead or withered leaves, and plants killed by frost and slugs
- 23 T Give plants in pots fresh earth, and if root bound, put them in larger pots
- 24 W Hand pick or hoe up weeds as soon as they appear through the ground
- 25 T Destroy worms, slugs, and snails whenever they appear, as after a shower
- 26 F Prepare composts, manures, and mixed earths for dressing borders and beds
- 27 S Collect and prepare sticks for sticking such flowers as are far advanced
- 28 S
- 29 M Thin Annuals where thick, taking care not to move the roots of the remainder
- 30 T Auriculas and Polyanthus will now be in flower, or nearly so; also Hyacinths

SPRING.

MONTHLY FLORAL CALENDAR.

MAY, XXXI.

FLOWER GARDEN.

Poet's Narcissus	Narcissus Poeticus
Milk Wort	Polygala Vulgaris
White Peony	Paeonia Albiflora
Columbine	Aquilegia Vulgaris
Yellow Asphodel	Asphodelus Luteus
Lily of the Valley	Convallaria Majalis
Globe Flower	Trollius Europæus et Asiaticus
Laurel Rose	Rhododendron Ponticum
Monkshood	Aconitum Napellus
Broom	Spartium Scoparium
Lilac	Syringa vulgaris et Persica
German Flag	Iris Germanica
China Rose	Rosa Indica
Germander Speedwell	Veronica Chamædrys
London Pride, or None-so-pretty	Saxifraga Umbrosa
Crimson Geranium	Geranium Sanguineum
Star of Bethlehem	Ornithogalum Umbellatum
Rough Comfrey	Symphytum Asperimum
Cambrian Poppy	Papaver Cambricum
Deadly Nightshade	Atropa Belladonna
Calceolarias	Calceolaria Corymbosa, &c.
Yellow Currant	Ribes Aureum
Woodroof	Asperula Odorata
Common Syringa	Philadelphus Coronarius
Medlar	Mespilus Germanica
Three-lobed Spiræa	Spiræa Trilobata
Comfrey	Symphytum Officinale
Lungwort	Pulmonaria Officinalis
	Solanum Crispum
	Magnolia Purpurea
	Paeonia Moutan
	Lupinus Polyphyllus
	Azalea
	Spiræa Bella
	Glycine Sinensis
	Crataegus
	Penstemon Scouleri
	Ribes Speciosum

GREEN HOUSE.

Cineraria	[rum]	Calceolaria
Tropæolum	Tricolor	Erica
Hydrangea		Hydrangea
Clianthus		Mimulus
Erica		Geranium
Alonsoa		Nemophila
Cactus		Rose China
Azalea		Azalea White
Cineraria		Rhodanthé
		Eriostemon Buxifolium
		Chorizema Rhombeum
		Aphelaxis Sesamoides
		Mirbelia Reticulata
		Daviesia Latifolia
		Bossiaea Ensata
		Platylobium Triangulare
		Pimelea Sylvestris
		Boronia Alata

SUMMER.

DAILY FLORAL CALENDAR.

MAY, XXXI.

- | | | |
|----|---|--|
| 1 | W | Search carefully over buds of Roses and destroy the caterpillars |
| 2 | T | Turn out plants in pots, as Fuchsias, Geraniums, &c. into the open borders |
| 3 | F | Sow hardy Annuals for succession, such as Candy Tuft, Larkspur, Lupins, &c. |
| 4 | S | Sow Carnation seed in pots or boxes, in light rich soil, and cover lightly |
| 5 | S | |
| 6 | M | Stir the earth amongst Annuals, particularly when beaten down with rain |
| 7 | T | Replant Violet beds with offsets of seedlings; sow seed, and water well |
| 8 | W | Let Camellias have a temperature of 55° to 60° by night and 65° to 70° by day |
| 9 | T | Cuttings of China Roses, Heaths, and other flowers can now be easily struck |
| 10 | F | If Auriculas are out of flowering, they may be repotted, unless seed be wanted |
| 11 | S | If Polyanthuses are out of flower, they may be repotted, unless seed be wanted |
| 12 | S | |
| 13 | M | Divide Chrysanthemums, select the strongest offsets, and pot them singly |
| 14 | T | If enough was not sown last month, sow Biennials for next year's flowering |
| 15 | W | Mignonette should be now fully exposed to the air, and sown for succession |
| 16 | T | Expose to the air ten weeks Stocks forwarded in frames and sow more seed |
| 17 | F | Destroy worms, slugs, and snails, whenever they appear, as after a shower |
| 18 | S | Attend to neatness by sweeping and rolling the garden walks once a week |
| 19 | S | |
| 20 | M | Transplant Annuals to their final situations, if sufficiently advanced |
| 21 | T | Water abundantly all newly planted flowers, and particularly seedlings |
| 22 | W | Stick carefully Carnations, Pinks, and other flowers that require it |
| 23 | T | Prepare composts, manures, and mixed earths, for top-dressing pots |
| 24 | F | Take up such Bulbs as have dropped their leaves, dry them, and store them |
| 25 | S | Hand-pick, where the flowers are thick, all weeds wherever they appear |
| 26 | S | |
| 27 | M | Give plants in pots fresh earth, and if root bound put them in larger pots |
| 28 | T | Turn Dahlias out of frames into places where they are intended to flower |
| 29 | W | Wash Rose trees and other flowers with Tobacco tea, to destroy the aphides |
| 30 | T | Remove all dead or withered leaves, and plants killed by slugs and grubs |
| 31 | F | Cut down all flower stems as soon as out of flower, unless the seed be wanted |

SUMMER.

MONTHLY FLORAL CALENDAR.

JUNE, XXX.

SUMMER.

FLOWER GARDEN.

White Jasmine	Jasminum Officinale
Greek Valerian	Polemonium Cæruleum
Sword Lily	Gladiolus Communis
Dwarf Larkspur	Delphinium Ajacis
Honeysuckle	Lonicera Periclymenum et Caprifolium
Turkscap Lily	Lilium Pomponium
Fraxinella	Dictamnus Albus
Province Rose	Rosa Provincialis
Indian Pink	Dianthus Slnensis
Guelldres Rose	Viburnum Opulus
Garden Pink	Dianthus Hortensis
Monkey Flower	Mimulus Luteus
Sweet William	Dianthus Barbatus
Night-smelling Rocket	Hesperis Tristis
Garden Poppy	Papaver Somniferum
Viper's Bugloss	Echium Vulgare
Venus's Looking-glass	Campanula Speculum
Spider Wort	Tradescantia Virginica
American Bindweed	Convolvulus Tricolor
Nasturtium	Tropaeolum Majus
Canterbury Bells	Campanula Medium
Rose Campion	Agrostemma Coronaria
Candytuft	Iberis Umbellata
Foxglove	Digitalis Purpurea
White Lily	Lilium Candidum
Yellow Rose	Rosa Lutea
Carnation Poppy	Papaver Rhæas
Maiden Pink	Dianthus Deltoides
Thrift	Statice Armeria
	Benthamia Fragifera
	Papaver Orientale
	" Braetatum
	Philadelphus Speciosus
	" Grandiflorus
	Deutzia Scabra
	Collinsia Bicolor
	Clarkia Pulchella
	Godetia Lindleyana
	Clintonia Pulchella
	Nemophila Insignis
	Cistus
	Petunia Hybrids
	Pentstemon Procerus
	Cotonaster Frigida
	" Rotundifolia
	Mimulus Cardinalis
	Esculus Carnea

GREEN HOUSE.

Hydrangea	Calistachys Lanceolata
Geranium	Goodia Lotifolia
Calceolaria	Astelma Eximium
Crowea Saligna	Nemophila Insignis
Erica Aristata	Mesembryanthemum
" Propendens	Anagallis
Pimelea Decussata	Lobelia
" Hispida	Clintonia Pulchella
Chorizema Henchmanni	

DAILY FLORAL CALENDAR.

JUNE, XXX.

SUMMER.

- 1 S Shade Ranunculuses and Carnations in flower from the violence of the sun
- 2 S
- 3 M Take up Anemones, Hyacinths, Tulips, and other bulbs, if the leaves are dead
- 4 T Make pipings of, and layer Pinks and Carnations, and water them well
- 5 W Mow and sweep grass plats if they require it, and clip Box and other edging
- 6 T Turn out Dahlias in frames where they are to flower if not done last month
- 7 F Prune back French and English Roses, when they are wanted to flower late
- 8 S Water twice a day Hydrangeas, Forget-me-nots, and other flowers in pots
- 9 S
- 10 M Cuttings of Fuchsias, China Roses, and other flowers may now be easily struck
- 11 T If not done on the 10th of May, repot Auriculas, unless the seed be wanted
- 12 W If not done on the 10th of May, repot Polyanthuses, unless the seed be wanted
- 13 T Remove green house plants to a sheltered summer station, if not yet done
- 14 F Top-dress Carnations in pots, with compost prepared for the purpose
- 15 S Stick carefully Carnations, Pinks, and other flowers that require it
- 16 S
- 17 M Destroy worms, slugs, and snails; after a shower is the best time to find them
- 18 T Search for earwigs among curled leaves, &c. and set traps for them
- 19 W Transplant Annuals into their final situations, if sufficiently advanced
- 20 T Water abundantly all newly planted flowers, and particularly seedlings
- 21 F Attend to neatness, by sweeping and rolling the garden walks
- 22 S Hoe up, or pick up where the flowers are thick, all weeds with the hand
- 23 S
- 24 M Thin out seedling patches of Annuals, Biennials, and Perennials
- 25 T Prick out Biennials and Perennials into small neat beds to get strength
- 26 W Stir the earth up amongst Annuals, particularly when beaten down with rain
- 27 T Remove all dead or withered leaves and plants, and pick off withered blossoms
- 28 F Cut down the flower stems as soon as out of flower, unless the seed be wanted
- 29 S Sow all sorts of Annuals, if wanted to flower late in Autumn
- 30 S

MONTHLY FLORAL CALENDAR.

JULY, XXXI.

FLOWER GARDEN.

Damask Rose	Rosa Damascena
Yellow Rock Rose	Cistus Helianthemum
Evening Primrose	Oenothera Biennis
Martagon Lily	Lilium Chalcedonicum
Common Mullein	Verbascum Thapsus
Thorn Apple	Datura Stramonium
Musk Mallow	Malva Moschata
Traveller's Joy	Clematis Vitalba
House Leek	Sempervivum Tectorum
Japan Lily	Lilium Japonicum
Tree Mallow	Lavatera Arborea
Tulip Tree	Liriodendron Tulipifera
Sweet Pea	Lathyrus Odoratus
Lavender	Lavandula Spica
Dahlia	Dahlia Pinnata
China Aster	Aster Sinensis
African Marygold	Tagetes Erecta
Holyhock	Alcea Rosea
Honey Wort	Cerintho Major
Blue Lupin	Lupinus Hirsutus
Tiger Lily	Lilium Tigrinum
Cape Marygold	Calendula Pluvialis
Yellow Lupin	Lupinus Luteus
African Lily	Agapanthus Umbellatus
Prince's Feather	Amaranthus Hypochondriacus
Cardinal Flower	Lobelia Fulgens
Love-lies-bleeding	Amaranthus Caudatus
Scarlet Lychnis	Lychnis Chalcedonica
Annual Sunflower	Helianthus Annuus
Purple Bindweed	Convolvulus Purpureus
Persicaria	Polygonum Orientale
Flowering Rush	Butomus Umbellatus
Perennial Sunflower	Helianthus Multiflorus
Snapdragon	Antirrhinum Oronitum
Musk Scabious	Scabiosa Atropurpurea
Olive	Olea Europaea
Spiraea Ariaefolia	Lathyrus Grandiflora
Philadelphus Gordonianus	Pentstemon Speciosum
Bartonia Aurea	" Ovatum
Calandrinia Discolor	" Glandulosum
Nolana	" Venusium
Eschscholtzia Crocea	Potentilla Russellina
Delphinium Grandiflorum	" Nipalensis
Gaillardia Picta	Catananche Bicolor
Geum Chilense	Stocks
	Caprifolium Flexuosum

GREEN HOUSE.

Geraniums	Nerium Oleander
Hydrangea	Mirbelia Baxteri
Fuchsia	Candollea Cuneiformis
Petunia	Clethra Arborea
Geranium	Myrtus Communis
Hydrangea	Humea Elegans [nalis]
Fuchsia	Mimulus Roseo Cardi-
Petunia	Erica Florida
Rhodanthe	" Ampullacea
Anigozanthos	" Ventricosa

SUMMER.

DAILY FLORAL CALENDAR.

JULY, XXXI.

SUMMER.

- 1 M Turn out into spaces in the borders every green house plant that can be spared
- 2 T Take up Ranunculuses and Anemones as soon as they have done flowering
- 3 W If not yet done, take up Hyacinths, Tulips, and other bulbs out of flower
- 4 T Make pipings of, and layer Pinks and Carnations, giving them plenty of water
- 5 F Stick Chrysanthemums, and repot them into larger pots, if root bound
- 6 S Stick Dahlias and all other tall flowers that require it as they advance
- 7 S
- 8 M Thin out Annuals, Biennials, and Perennials, and prick out the thinnings
- 9 T Repot green house, hot house, and other plants that require it, into larger pots, with proper composts
- 10 W Sow Biennials and Perennials for flowering next year, and Annuals for winter
- 11 T Plant beds of Heart's Ease with seedlings, or offsets, and layer the old shoots of choice sorts
- 12 F Transplant Biennials and Perennials to gain strength before next year
- 13 S Water abundantly, twice a day, newly planted flowers and plants in pots
- 14 S
- 15 M Mow and sweep grass plats when they require it, and clip box edgings
- 16 T Search for and destroy worms, slugs, snails, and all destructive insects
- 17 W Search for earwigs among curled leaves, &c. and set traps for them
- 18 T Attend to keep the garden walks neat, by sweeping and rolling once a week
- 19 F Cut away the flower stems as soon as the flowers are off, unless seed be wanted
- 20 S Hoe up weeds wherever they appear, and remove withered plants and leaves
- 21 S
- 22 M Stir the earth amongst Annuals, particularly when beaten down with rain
- 23 T Plant seedling Auriculas in pots of compost prepared for the purpose
- 24 W Gather what seeds are now ripe, clear them out and sort them for next year
- 25 T Bud Rose, Lemon, and Orange Stocks, if the bark rise well
- 26 F Cuttings of Geraniums, Fuchsias, Heaths, &c. may now be easily struck
- 27 S Plant out seedling Polyanthuses in pots of compost made for the purpose
- 28 S
- 29 M Shelter choice flowers from the violence of the sun and heavy rains
- 30 T Plant seedling Tulips and other bulbs in pots with composts for the purpose
- 31 W Sow Mignonette in pots or boxes, to flower through the winter in doors

MONTHLY FLORAL CALENDAR.

AUGUST, XXXI.

FLOWER GARDEN.

French Marigold	Tagetes Patula
Zinnia	Zinnia elegans et multiflora
Passion Flower	Passiflora Cærulea
Dyer's Coreopsis	Coreopsis Tinctoria
Yellow Gentian	Gentiana Lutea
Sweet Sultan	Centaurea Moschata
Calathian Violet	Gentiana Pneumonanthe
Ladies' Traces	Spiranthes Autumnalis
American Groundsel	Senecio Elegans
Globe Thistle	Echinops Sphærocephalus
Soap Wort	Saponaria Officinalis
Turnsole	Heliotropium Europæum
Golden Rod	Solidago Odora et Gigantea
Grove Aster	Aster Nemoralis
Tansy	Tanacetum Vulgare
Siberian Wallflower	Cheiranthus Rostratus
Shining Marigold	Tagetes Lucida
Winter Cherry	Physalis Alkekengi
Long-flowered Marvel	Mirabilis Longiflora
of Peru	
Pyramidal Monkshood	Aconitum Pyramidale
Calceolarias	Calceolaria Integrifolia, &c.
American Trumpet-tree	Catalpa Syringifolia
Sorb-leaved Spiræa	Spiræa Sorbifolia
Purple Thorn-apple	Datura Metel

Cyclamen Clusii
 Ceanothus Azureus
 Clematis Florida
 Oenothera Speciosa
 Macrocarpa

GREEN HOUSE.

Hydrangea
 Petunia
 Elchrysium
 Erica
 Fuchsia
 Rose
 Rhodanthe
 Thysanotus
 Erica Retorta
 „ Irbyana
 Polygala Filiformis
 Thunbergia Alata
 Polygala Oppositifolia—major
 Bauera Rubioides
 Lobelia Speciosa
 „ Cardinalis
 Morna Nitida
 Mesembryanthemum Aureum
 Campanula
 Gaillardia Picta

AUTUMN

DAILY FLORAL CALENDAR.

AUGUST, XXXI.

AUTUMN.

- 1 T Stick Dahlias, Coreopsis, Sweet Peas, and other flowers that require it
- 2 F Sow half hardy and other Annuals for flowering indoors during winter
- 3 S Water Balsams, and other succulent flowers in pots, regularly twice a day
- 4 S
- 5 M Cuttings of Dahlias, Azaleas, Heaths, China Roses, &c. can now be struck with a little heat
- 6 T If not done last month, bud Roses and Orange Stocks, if the bark rise well
- 7 W If not done last month, pipe and layer Carnations, Pinks, Picotees, Hearts Ease, &c.
- 8 T Take up Ranunculuses and Anemones, if the leaves have died off, and dry them
- 9 F Attend to keep the garden walks neat by sweeping and rolling once a week
- 10 S Divide Violet roots, and plant new beds with the offsets or with seedlings
- 11 S
- 12 M Stir the earth in beds and borders, particularly if beaten down with rain
- 13 T If Calceolarias are wanted to flower late in Autumn they must be cut down
- 14 W Sow Auricula and Polyanthus seed in pots, that they may be easily protected
- 15 T Mow and sweep grass plats, once every six or seven days, and clip box edging
- 16 F Plant offsets of dried bulbs being too tender to bear being out of the ground
- 17 S Transplant Biennials and Perennials to get strength by next year
- 18 S
- 19 M Sow Mignonette in pots or boxes for flowering in doors during the winter
- 20 T Hoe up weeds wherever they appear, and remove dead or withered plants
- 21 W Look over dried Bulbs and Roots in doors, and see that they are not mouldy
- 22 T Collect and prepare composts, and mixed earths, for top-dressing pots
- 23 F Train climbing plants against walls, such as the Everlasting or Sweet Pea
- 24 S Shelter choice flowers from the violence of the sun, and heavy rains
- 25 S
- 26 M Thin out Annuals, Biennials, and Perennials, and prick out the thinnings
- 27 T Cut down flower stems as soon as the flowers are off, unless the seeds be wanted
- 28 W Gather what seeds are now ripe, clear them, and sort carefully for next year
- 29 T Water abundantly all newly planted flowers, plants in pots, twice a day
- 30 F Search carefully for slugs and snails, and set traps for earwigs
- 31 S Wash with Tobacco tea, Rose trees, and other plants infected with aphides

MONTHLY FLORAL CALENDAR.

SEPTEMBER, XXX.

FLOWER GARDEN.

Amarella	Gentiana Amarella
Golden Rod	Solidago Virgaurea
Harvest Bells	Campanula Rotundifolia
Autumnal Hyacinth	Scilla Autumnalis
Rose Feverfew	Pyrethrum Roseum
Michaelmas Daisy	Aster N. Angliae
Devil's Bit Scabious	Scabiosa Succisa
Southernwood	Artemisia Abrotanum
Italian Pimpernel	Anagallis Monelli
Meadow Saffron	Colchicum Autumnale
Clary	Salvia Sclarea
Red Valerian	Centranthus Ruber
Fuchsias	Fuchsia Gracilis, etc.
Scarlet Houstonia	Bouvardia Triphylla
Musk Rose	Rosa Moschata
Meadow Sweet	Spiraea Ulmaria
Tiger Flower	Tigridia Pavonia

Phlox Reflexa
 „ Thompsoni and Browni
 Escallonia Rubra
 Pentstemon Pulchellus
 Statice Speciosa
 Rudbeckia Hirta
 Gaillardia Aristata
 Penstemon Gentianoides
 Leptosiphon Androsaceua
 Stenactis Speciosa
 Oenothera Anisoloba

GREEN HOUSE.

Hydrangea
 Petunia
 Fuchsia
 Erica
 Agapanthus
 Calceolaria
 Gladiolus
 Daphne
 Myoporum Debile
 Thunbergia
 Rhodanthe Manglesii
 Rhodochiton Volubile
 Verbena Incisa
 „ Tweediana
 Thunbergia Leucantha
 Plumbago Capensis
 Chironia Peduncularis
 Gardoquia Hookeri
 „ Multiflora

AUTUMN.

DAILY FLORAL CALENDAR.

SEPTEMBER, XXX.

- 1 **S**
- 2 **M** Plant out Ranunculuses in frames, if wanted to flower in January
- 3 **T** Transplant Annuals, Biennials, and Perennials, to gain strength by next year
- 4 **W** Sow Biennials and Perennials to flower next year; protect in frosty weather
- 5 **T** Cut down China Rose Trees, and if protected they will flower about Christmas
- 6 **F** Bring Camellias into the green house to flower early; they can now be budded
- 7 **S** Cuttings of China Roses, Fuchsias, and other flowers, will now easily strike
- 8 **S**
- 9 **M** Sow Auriculas in boxes, to allow of winter protection; also Tulips, Anemones, &c.
- 10 **T** If Carnation layers have taken root, pot them with mould for the purpose
- 11 **W** Stick Dahlias, if not done before, also all other flowers that require it
- 12 **T** Make beds of different sizes, according to the quantity of roots, for Tulips, &c.
- 13 **F** Sow hardy Annuals, as Pheasant's Eye, Larkspur, and others to stand the winter
- 14 **S** Strike monthly Roses; also layer Sweet Briar, and other Roses
- 15 **S**
- 16 **M** Sow Mignonette in boxes; if protected it will flower during the winter
- 17 **T** Sow ten weeks Stocks, and protect them in frames, 'or otherwise, to flower early
- 18 **W** Stir the earth well amongst the beds and borders, particularly after rain
- 19 **T** Prepare composts, manures, and mixed earths, for top-dressing pots
- 20 **F** Shelter choice florist's flowers from heavy rains, and from the sun
- 21 **S** Gather what seeds are now ripe, if dry, clear and sort them for use next year
- 22 **S**
- 23 **M** Cut off all flower stems as soon as the flowers have fallen, unless seed be wanted
- 24 **T** Most bulbs may now be planted, as Hyacinths, Crocuses, Tulips, and others
- 25 **W** Water plants in pots, and in the beds, but it is not so much wanted as last month : too much will do harm
- 26 **T** Destroy weeds wherever they appear; remove dead or withered leaves or plants
- 27 **F** Search in all parts of the garden for slugs, snails, and other vermin
- 28 **S** Sweep and roll the walks once a week, and pick up the weeds on them
- 29 **S**
- 30 **M** Mow and sweep the grass plats, once a week, or as they require it

AUTUMN.

MONTHLY FLORAL CALENDAR.

OCTOBER, XXXI.

FLOWER GARDEN.

Late Feverfew	Pyrethrum Serotinum
Sweet Maudlin	Achillea Ageratum
Beautiful Aster	Aster Pulcherrimus
Liatris	Liatris elegans et Pilosa
Garden Gold Flower	Chrysanthemum Corona- rium
Belladonna Lily	Amaryllis Belladonna
Guernsey Lily	Nerine Sarniensis
Saffron Crocus	Crocus Sativus
Dahlia	Dahlia Superflua
Yellow Amaryllis	Sternbergia Lutea
Parrot Corn-flag	Gladiolus Psittacinus
Scarlet Sage	Salvia Fulgens
Round-headed Buddlea	Buddlea Globosa
Spotted Honeywort	Cerinthe Maculata

Phlox Tardiflora
 Oenothera Serotina
 Daphne Hybrida
 Clematis Flammula
 Lavatera Triloba
 Physianthus Albens

GREEN HOUSE.

Rose	Geranium
Chironia	Lobelia
Petunia	Cineraria
Calceolaria	Fuchsia
Polygala	Polygala
Crassula Falcata	Hydrangea
Cineraria	Salvia
Primula Sinensis	Elchrysium
Verbena Melindres	

Verbena Incisa
 „ Araniana
 Cassia Acuminata
 Tecoma Capensis
 Erica Mammosa
 Plumbago Capensis

AUTUMN.

DAILY FLORAL CALENDAR.

OCTOBER, XXXI.

1	T	Lay about the roots of Dahlias, &c. a few inches of leaves, to keep out frost
2	W	Put plants in pots out of doors, if mild; but take them in at night
3	T	Plant Anemones and Ranunculuses in beds of compost prepared for the purpose
4	F	Plant Tulips, Hyacinths, Crocuses, &c. in beds prepared for the purpose
5	S	Protect Carnations, both young plants and layers in pots, from severe frost
6	S	
7	M	Plant out Guernsey and Belladonna Lilies in pots, for next year's flowering
8	T	Bring in green house plants from their summer station, and keep out the frost
9	W	Plant Rhododendrons in pots for bringing in for forcing next month
10	T	Bring Rose trees in pots into the forcing house to flower in December
11	F	Plant Carnations for forcing, in pots of compost prepared for the purpose
12	S	Plant Pinks for forcing, in pots of compost prepared for the purpose
13	S	
14	M	Protect the ten weeks Stocks sown last month from frost
15	T	Transplant seedling Biennials and Perennials; also old roots if required
16	W	Protect the Mignonette sown last month, but give it light and air, if mild
17	T	Dig up, divide the offsets of, and replant Perennial herbaceous flowers
18	F	Collect and prepare manures, and mix earth for dressing borders
19	S	Protect choice florist flowers with hoops and mats from heavy rains, &c.
20	S	
21	M	Dig up, and winter dress borders and beds, if the ground be dry
22	T	Sow hardy Annuals, such as Larkspur, &c. in pots to allow of protection
23	W	Attend to neatness by sweeping and rolling the garden walks once a week
24	T	Pluck up with the hand, where flowers are thick, all weeds as they appear
25	F	Cut down flower stems, as soon as the flowers are off, unless seed be wanted
26	S	Gather what seeds are now ripe, clear them, and sort them for use next year
27	S	
28	M	Plant Box, Daisy, Thrift, or other edgings, by line, and water at planting
29	T	Mow grass plats when wanted; water with lime water, if worms appear
30	W	Search carefully in all parts of the garden for slugs, snails, and insects
31	T	Water sparingly; few plants require water now, except green house plants

Autumn.

MONTHLY FLORAL CALENDAR.

NOVEMBER, XXX.

FLOWER GARDEN.

Mountain Violet	Viola Altaica
Sweet Coltsfoot	Tussilago Fragrans
Ten-petalled Sun-flower	Helianthus Decapetalus
Chinese Chrysanthemum	Chrysanthemum Sinense
Indian Hawthorn	Raphiolepis Rubra
Blue Sage	Salvia Augustifolia
Arbutus	Arbutus Unedo
Irish Heath	Menziesia Dabeoct
Blue headed Gilia	Gilia Capifata
Grey-leaved Bind-weed	Convolvulus Althæoides
Scarlet Lobelia	Lobelia Fulgens

GREEN HOUSE.

Chrysanthemum
Camellia
Daphne
Coronilla
Chironia Linifolia
Chorizema Cordifolium
Salvia Splendens
Erica Colorans
„ Taxifolia

WINTER.

DAILY FLORAL CALENDAR.

NOVEMBER, XXX.

- | | |
|------|---|
| 1 F | Take up Dahlia roots, if mild and dry, and put them in an airy situation to dry |
| 2 S | If mild and dry, take up Marvel of Peru roots and keep them like potatoes |
| 3 S | |
| 4 M | Put plants in pots out of doors in the day, if mild, taking in again at night |
| 5 T | Plant Hyacinths, in rich soil, in beds, in rows 8 in. wide and 6 in. apart |
| 6 W | Plant wild Rose stocks for bud-grafting tree or standard Roses next summer |
| 7 T | Bring Rose trees in pots or tubs into the forcing house, to flower in February |
| 8 F | Plant Tulips in an open situation in rich sandy loam about 5 inches apart |
| 9 S | Plant Ranunculuses in frames to produce flowers in March and April |
| 10 S | |
| 11 M | Prepare Ranunculus beds to be ready for planting early in Spring |
| 12 T | Shelter Mignonette from severe frost, and water sparingly, unless it be mild |
| 13 W | Transplant Biennials, if very mild, but they are better to be left till Spring |
| 14 T | Mow grass plats when wanted, water with lime water, and roll if worms appear |
| 15 F | Let Chrysanthemums in the green house have plenty of light and air, if mild |
| 16 S | Protect ten weeks Stocks, sown last August, from night frost; water sparingly |
| 17 S | |
| 18 M | Protect all tender flowers from severe frosts with ashes, litter, or leaves |
| 19 T | Prepare composts, manures, and mixed earths, for dressing borders and beds |
| 20 W | Plant out, if mild and dry, all descriptions of dried roots, such as Anemones |
| 21 T | Collect what seeds are now ripe, clear them, and sort them carefully |
| 22 F | Protect beds of bulbous-rooted plants from frost by hoops and mats |
| 23 S | Divide the roots of Perennial herbaceous flowers, and replant, if mild and dry |
| 24 S | |
| 25 M | Attend to neatness by sweeping and rolling the paths. |
| 26 T | Bring Rhododendrons into the forcing-house, increasing the heat by degrees |
| 27 W | Bring in Pinks and Carnations, for forcing, increasing the heat by degrees |
| 28 T | Dig up roughly, and dress flower borders, taking care of underground roots |
| 29 F | Keep Calceolarias now in blow in an airy cool part of the green house |
| 30 S | Bring Camellias into the vinery, and let not the heat exceed 60 degrees |

WINTER.

MONTHLY FLORAL CALENDAR.

DECEMBER, XXXI.

FLOWER GARDEN.

China Roses	Rosa Indica
Late Chrysanthemums	Chrysanthemum Sinense
Japan Allspice	Chimonanthus Fragrans
Chinese Jasmine	Jasminum Revolutum
Cape Aletris	Tritoma Uvaria
Violets	Viola Odorata
Heartsease	Viola Tricolor
Japan Corchorus	Kerria Japonica

GREEN HOUSE.

Chrysanthemum
 Cineraria
 Daphne
 Primula Sinensis
 Camellia
 Primula Sinensis
 Chorizema Cordifolium
 Erica Gracilis
 „ Colorans
 Lechenaultia Formosa
 Epacris Impressa
 Luculia Gratissima

WINTER.

DAILY FLORAL CALENDAR.

DECEMBER, XXXI.

- 1 S
- 2 M Protect Tulips from frost, or heavy rain, by matting, or a thick layer of leaves
- 3 T Bring Roses in pots into the forcing house, to come into flower in February
- 4 W Bring Pinks and Carnations into the forcing house, to flower early
- 5 T Bring Rhododendrons into the forcing house, if wanted to flower early
- 6 F Give plenty of water to Chrysanthemums in pots, which are now in blow
- 7 S Protect the roots of Hydrangeas and other half hardy flowers in open borders
- 8 S
- 9 M Plant Box or other edging, neatly by line, if the weather be mild, and water
- 10 T Keep plants in pots rather dry, and take in doors in severe weather
- 11 W Dig and dress flower borders, taking great care not to touch sunken roots
- 12 T Collect and prepare composts, manures, and mixed earths for dressing borders
- 13 F Cover Polyanthuses in wet weather, with matting, uncovering when possible
- 14 S Cover Auriculas in wet weather, with matting, uncovering when possible
- 15 S
- 16 M Let green house plants have as much air as possible, if it be mild
- 17 T Protect Mignonette from frost, giving it plenty of light and air, if it be mild
- 18 W Bring Camellias in frames into a heat not exceeding 55° to make them flower
- 19 T Protect tender roots from frost, with long dung, fern leaves, or litter
- 20 F If the weather be wet, clear out and sort what seeds have not yet been done
- 21 S Protect ten weeks Stocks from frost, giving them plenty of light and air if mild
- 22 S
- 23 M Keep frost out of the green house, by a gentle fire at night, and keep it dry
- 24 T Plant bulbous plants in pots, to succeed the October planting for forcing
- 25 W
- 26 T Look over Dahlia roots and see that they are quite dry, and free from mould
- 27 F Prepare mould for Carnations, of $\frac{2}{3}$ loam, $\frac{1}{2}$ rotten dung, and 1-6 sand
- 28 S Bring Lilacs in pots or tubs for forcing into the forcing house, to flower early
- 29 S
- 30 M Destroy worms, slugs, and snails, whenever they appear, as after a shower
- 31 T Attend to neatness by sweeping and rolling the walks, removing dead leaves

WINTER.

MONTHLY FLORAL CALENDAR.

JANUARY, XXXI.

FLOWER GARDEN.

Laurustinus	Viburnum Tinus
Bearsfoot	Helleborus Fœtidus
Garden Anemone	Anemone Hortensis
Christmas Rose	Helleborus Niger
Yellow Hellebore	Eranthis Hyemalis
Sweet Coltsfoot	Tussilago Fragrans
Snowdrop	Galanthus Nivalis
Japan Quince	Cydonia Japonica
China Rose	Rosa Indica
Japan Allspice	Chimonanthus Fragrans

Garrya Elliptica
Andromeda Floribunda

GREEN HOUSE.

Cineraria
Camellia
Daphne Dauphine
„ Indica
Chrysanthemum
Narcissus
Geranium
Kalmia
Azalea Indica
Epacris Impressa
Primula Sinensis
Leschenaultia Formosa
Diosma Ambigua
Correa Speciosa
Erica Vernalis
„ Linnæoides
Boronia Pinnata

WINTER.

DAILY FLORAL CALENDAR.

JANUARY, XXXI.

- | | | |
|----|---|---|
| 1 | W | Continue to protect Tulip beds as they require it, with matting, leaves, and the like |
| 2 | T | Cover the ground over Lilies, and other plants that die down, with leaves, &c. |
| 3 | F | Keep plants in pots rather dry, and take in doors in severe weather. |
| 4 | S | Top dress Auriculas in pots, or borders, with compost for the purpose |
| 5 | S | |
| 6 | M | Plant Ranunculuses in pots, in frames, to come into flower in April |
| 7 | T | Bring Rose trees in pots into the forcing house, to come into flower in March |
| 8 | W | Bring Lilacs in pots or tubs into the forcing house, if not done last month |
| 9 | T | Bring Rhododendrons in tubs into the forcing house, if wanted to flower early |
| 10 | F | Force Pinks, to succeed those put in the forcing house 4th of December |
| 11 | S | Force Carnations, to succeed those put in the forcing house 4th of December |
| 12 | S | |
| 13 | M | Bring Hyacinths in pots for forcing, into the forcing house, to flower early |
| 14 | T | Sow Mignonette in boxes in light sandy soil, on a slight hot-bed for succession |
| 15 | W | Sow ten weeks' Stocks in boxes or pots on a slight hot-bed, for succession |
| 16 | T | Sow Dahlia seeds, for new sorts, and put old roots in a hot-bed, to blow early |
| 17 | F | Edge flower borders with Box neatly by line, if this has not yet been done |
| 18 | S | Edge flower borders with Daisies, for variety, neatly by line |
| 19 | S | |
| 20 | M | Protect beds of Anemones, planted in November, by matting, or layers of leaves |
| 21 | T | Protect beds of Ranunculuses, planted in November, by matting or leaves |
| 22 | W | Attend to neatness, by sweeping and rolling the walks |
| 23 | T | Destroy worms, slugs, and snails whenever they appear, as after a shower. |
| 24 | F | If the weather be wet, clear and sort out what seeds have not yet been done |
| 25 | S | Remove all dead or withered leaves, and plants killed by the frost |
| 26 | S | |
| 27 | M | Collect and prepare composts, manures, and mixed earths for dressing borders |
| 28 | T | Dig and dress flower borders, taking great care not to disturb sunken roots |
| 29 | W | Let plants in the greenhouse have as much air as possible, if it be mild |
| 30 | T | Cut down the stems of plants that have done flowering |
| 31 | F | If not yet done, plant out all dried roots, as Anemones, if mild and dry |

WINTER.

GENERAL OBSERVATIONS

ON

THE MONTHS.

SPRING.

"Advancing Spring profusely spreads abroad,
Flowers of all hues, with sweetest fragrance stored."

FEBRUARY.—As the temperature rises about two degrees, such plants as begin to shoot require shelter from occasional frosts which occur on an average one night in three.

MARCH.—The rise of the temperature, about six degrees; and the common occurrence of dry easterly winds, while it is favorable to sowing, often proves more hurtful to unsheltered growing plants, than winter frosts.

APRIL.—The rise of the temperature, about six degrees, nearly doubles evaporation, and hence frequent showers, but often cutting winds, and a few frosty nights, much injure young seedling plants when unprotected.

SUMMER.

"The winter is past, the rain is gone, the flowers appear
on the earth, the time of the singing birds is come, and the
voice of the turtle is heard in our land."

MAY.—The increasing warmth, and the more rapid growth which it occasions, render frosty nights much to be dreaded for the more tender plants if risked out of doors.

JUNE.—There is now little fear of frost; but the rising temperature, when not accompanied by rain, increases evaporation, and renders watering necessary.

JULY.—The first two weeks are usually dry, the last two are commonly showery; hence the opinion of forty days' rain after St. Swithun's day. Artificial watering is often indispensable.

AUTUMN.

"There is a beautiful spirit breathing now,
Its mellow richness on the clustering shrubs,
As Autumn, like a faint old man, sits down
By the way-side weary."

AUGUST.—Although the days become shorter, the weather is for the first three weeks more dry and warm, particularly at night.

SEPTEMBER.—The shortening of the days brings colder weather, but rather in the mornings than in the afternoons and evenings.

OCTOBER.—Temperature diminishes and moisture increases, greatly checking vegetation. One or more nights of sharp frost should be expected and provided against, about the first week.

WINTER.

"See Winter comes, to rule the varied year,
Sullen and sad, with all his rising train;
Vapours, and clouds, and storms —"

NOVEMBER.—As the days become shorter the cold increases, and checks the transpiration and the growth of plants, which will hence require less and less water.

DECEMBER.—The deficiency of the sun's light and heat from the shortness of the day increases the cold, and nearly stops the growth of most plants, which will therefore be injured by more moisture than they can absorb.

JANUARY.—This is the most frosty month in the year, though frost does not in general continue for more than a few days in succession—rarely for several continuous weeks.

DESCRIPTION OF THE FRONTISPIECE.

On the general effect of flowers outside a house.

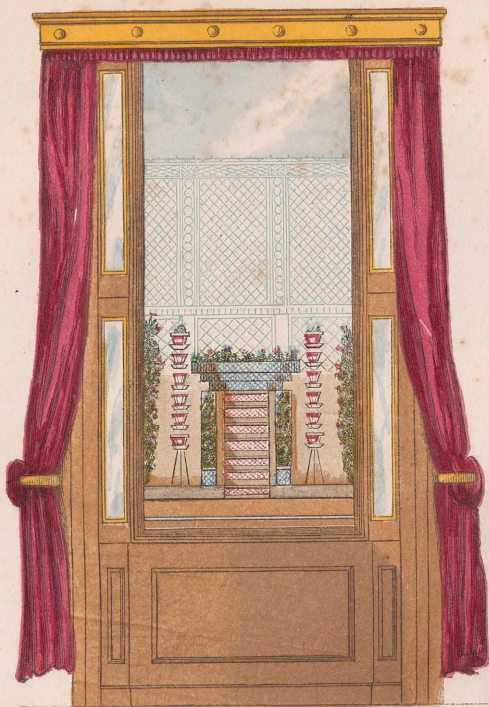
In this view, it is intended to shew the effect which may be produced by having flowers in the bed-room and dining-room-balconies, as well as in that of the Drawing-room, the whole combining with an uniform ornamental exterior a most pleasing and attractive object from within.

DESCRIPTION OF VIGNETTE.

A narrow strip, 9 feet by 12, on the sloping bank of the Grand Junction Reservoir, as seen from a back drawing room window.

In so very, very limited a space to produce any effect with flowers, it is advisable to exhibit them in "masses," and this desirable end is perhaps best attained by the aid of "*boxes*," which, when fronted with porcelain tiles, may be made gracefully rich and ornamental, and the contrast of the enamelled surface of the porcelain with the opaque leaves of the plants and the glowing tints of the flowers will produce a brilliant display; while at the same time by condensing and centralizing the groups, they may, by means of the boxes, be so disposed as to draw the attention to any particular point where it is intended that the focus of attraction should be. These boxes may be raised or lowered according as taste or local circumstances may suggest; in short, "Be it as your fancies teach you." They may be placed in the form of pyramids, or octagons, or the narrow tapering pagoda-shaped octagon, or in squares, or in rows or oblong divisions, with an "apex" here or there, as choice may dictate, or the nature of the ground require. An avenue may be formed, and any favourite class of plants brought forward, while others less cherished may be kept in the back ground. All these dispositions may be changed and re-changed. The groups may be so arranged as to conceal a wall, or any unsightly object, and may be removed nearer to one window or further from another, and no injury done to either the garden or the plants—no cutting up the lawn by digging out beds, which are unsightly in winter, and frequently not half stocked in summer. In London, one portion of these boxes may be kept at the nurseryman's filled with plants hardening and maturing for simultaneous floration, ready to relieve their predecessors. These in their turn, may be speedily succeeded by fresh masses of fragrant beauty and loveliness, while in the arrangement and disposition of the colours much taste and discernment may be shewn by the contrast of some tints so as to make one hue set off another; and the judicious blending and combining of the rest so as eventually to approach towards the desideratum so deservedly admired in the works of Van Huysum, Ver Elst, Van Oss, De Heem, and other eminent painters of flowers; and to save trouble, all these advantages may be effectually ensured by a contract for nine months out of the twelve, or from March, when we commence for eight or nine successive monthly fillings.

Could not an "*Isola Bella*" be made of the little Island facing the palace in St. James's Park, by fronting the *Western end* with eight receding rows of porcelain cased oblong boxes, disposed in octagons, about two feet deep, filled with flowers, with a gravel walk between each row? the boxes diminishing upwards to an apex. Each tier to rest on an iron frame two or three feet high. Porcelain vases at the corners of each octagon, would add greatly to the effect.



A MINIATURE FLOWER GARDEN,
18 feet by 12 feet, on the sloping bank of the Grand Junction
Reservoir - as seen from the back Dining-room Window.

(vide page 284)

THE FLOWER GARDEN.

The Pleasures of Gardening.

The love of flowers is one of the earliest impressions which the dawning of reason implants in the human mind; it is "engendered in the eyes," with "gazing fed," and is frequently observable almost in infancy. Happy the parents of children, in whose imaginations this desirable predilection is early evinced: it would be well to encourage and promote it by every indulgence—particularly in the case of females—as gardening is to them, a pursuit more likely to promote bodily health and mental recreation, than any other; * it will moreover early inculcate a salutary habit of reasoning and thinking on subjects worthy of exercising the thoughts, and calculated to improve them; and it will gradually train the mind to the study and observance of that most instructive volume 'The Book of Nature.'

"In Nature there's no blemish but the mind."

And the study of nature is one of the best means of improving this blemish. The passion for flowers is one of the most enduring and permanent of all enjoyments. At the coming of each revolving spring, we anxiously return to our loved and favourite pursuit; with joy and gratitude we perceive that the

"Ethereal mildness is come,"

that the glory of reviving nature is returned,

"Aucto splendore resurgo!"

Gladly we haste to watch the mysterious unravelling of the complicated, and exquisitely folded bud, the delicate gossamer of the embryo petal.

"The lovely flower scarcely formed or moulded,
The rose with all its sweetest leaves yet folded." †

In all ages, in all climes—"by saint, by savage, and by sage,"—the loveliness of flowers has been acknowledged. No sooner was the creation completed, than a "garden was planted," and man put into it, "to dress it and to keep it." Here then we have the very earliest Divine authority in favour of this fascinating pursuit; and it is the first occupation assigned to man from the beginning. What other is there so intellectual?—so graceful!—so fraught with all that is wonderful and beautiful? The glory of the wisest and wealthiest of kings was not to be compared to "The lilies of the field," not even to one of them!! And the most renowned and beautiful of ancient cities owed its greatest fame to the celebrity of its "hanging gardens."

In Pliny's description of his beautiful garden in Tuscany, how readily we trace the happiness and contentment, the solid and substantial enjoyment he found in following the intellectual pursuit he had so judiciously chosen. How clearly we perceive that this letter (the longest of all) is written "con amore;" how feelingly he says, "I here enjoy a more profound retirement: all is calm and composed, which contributes, no less than the clear air and unclouded sky, to that health of body and cheerfulness of mind which I particularly enjoy here."

In more modern times, and from the same cause, we find the celebrated cities of Aleppo and Damascus, the theme of admiration of all travellers—both these cities being "surrounded by gardens."

In the delightful pursuit of gardening, we never retrograde—we never cloy: here

“No crude surfeit reigns.”

We gaze on our flowers and find,

“Increase of appetite to grow by what it feeds on,”

And,

“Crescit amor florum, Studium sic crescit habendi,”

Is as trite and true as,

“Crescit amor nummi, quantum ipsa pecunia crescit.”

But mark the difference: every thing connected with flowers imparts gracefulness to the mind, delicacy to the thoughts, elegance and refinement to the imagination; and to these advantages we may safely add, goodness and benevolence to the heart. On the other hand, the augmentation of our wealth, brings care and anxiety, and a world of trouble. We are tempted to hoard and hoard, and like Quintin Matsys's misers, to think, and count, and calculate on our wealth, till at last we reluctantly leave it all behind, and “after death, would fain atone by giving what is not our own.”

“Look here upon this picture, and on this—”

* “We have had three or four Gipsy parties on your account. Capt. — has occasionally laid aside all his own operations, and accompanied the CHILDREN, by land and water, for a day's search in quest of seeds and flowers for you. S. and M. were much delighted in these excursions; and I have been more frequently from my home this year, in making up your collection, than during the whole time (nearly eight years) that we have resided in this sequestered spot.

My two children have been much gratified in the undertaking, and have really been of GREAT UTILITY, as their eyes being so much nearer the ground, they have been able to detect many minute specimens and seeds which I could not observe, for in our impervious bush, it is really difficult to find out what you are in quest of, the numberless specimens of flowers of the same colour, with different leaves, render the search very perplexing. S. I shortly found to be infinitely more “au fait” at discovering and remembering the abodes of different classes of plants than I was myself; and I have known her unexhausted patience go four and five times a week into the bush, to watch Nos. 74 and 83, lest the seeds should be open and shed. She is six years old, and such a pursuit is highly delightful to her young mind.”—From a Lady, an Amateur Florist, and enthusiastically devoted to the pursuit.—Dated Jan. 1839, from a remote Station in the S. W. extremity of Western Australia.

The youngest of these sisters was not able to speak plain, and yet she is reported to have been “very serviceable in discovering plants and collecting seeds”—The eldest, at six years of age, is making a “Hortus Siccus.”

† “Byron was particularly fond of flowers, and bought a large bouquet every day of a gardener whose grounds he passed. He told me that he liked to have them in his room, though they excited melancholy feelings, by reminding him of the evanescence of all that is beautiful, but that the melancholy was of a softer, milder character, than his general feelings.”—From Lady Blessington's Conversations with Lord Byron.

ON LAYING OUT FLOWER GARDENS.

In the arrangement of the flower garden, much of the effect depends on the peculiar forms and disposition of the beds, as well regarding the arrangements of the plants in height and colour, as to the space of ground and to the selection of plants, and their adaptation to the more or less exposed situation of the ground. The design is evidently a matter of taste and fancy, and may be classed among the fine arts, involving in it the exercise of invention, taste, and foresight. In different periods, the several styles

of Italian, Dutch, French, and the modern styles, masses. Formerly, the curves with turns in the landscape, and in the taste would suggest.

An artificial pond grows to be cut in steps, on which of different kinds; a silver gold and silver fish, and Lilies, Nymphaea, and to be pick-out, tasteful plants: large couch-grass. The late Mr. Wyndham justly observes, “that their appearance in a garden is a real life—constitutes their real

A variety of soils and different kinds of plants, suitable for year; but light, airy soil is preferred.

If the soil be all made over and grow near the nature of water, he destroyed; because of one kind with the good soil; and one of the flower gardens do not is very offensive; dry, sand, a little time, and weather.

Are extremely sterile in wet seasons the plants moisture in the clay, solid; that the roots manure, green vegetation so as to render it firm effect in destroying

Being open, while and water, also per rain and sunshine do relative soils. This rain manure.

As well as many, various animal and human.

Are more fertile than soils, can consequently perse. The beam rises Trampling, digging

of Italian, Dutch, French, Chinese, and English have been adopted: the modern style is a collection of irregular groups and masses. Formerly, flower beds were either circular, straight, or in curves, with turned scrolls at end, but are now in plots abounding in kaleidoscopic variety. The gravel walks skirting along at least one side of the principal figures, and interspersed where good taste would suggest.

An artificial pond greatly contributes to the effect; *the sides may be cut in steps*, on which may be placed tubs with aquatic plants of different kinds; a small *jet d'eau*, or fountain in the middle, and gold and silver fish swimming among the floating leaves of the Lilies, Sagitaria, and other flowers. Round the margin there may be rockwork, tastefully arranged and covered with a variety of plants: large conch-shells distributed here and there.

The late Mr. WYNDHAM, when speaking of flower gardens, very justly observes, "that places are not to be laid out with a view to their appearance in a picture, but to their use, and the enjoyment of them in real life:—their conformity to these purposes, is what constitutes their *real beauty*."

SOIL.

A variety of soils are required in the Flower garden, to suit the different kinds of plants. Vegetable mould is an excellent substitute for peat; but for the general purposes of the garden, a light loamy soil is preferable.

If the soil be all mould, it will be too rich—the plants will be overfed and grow rank; beside, the mould will become acrid by the mixture of water if suffered to remain in it, and vegetation will be destroyed; hence all soils are improved by a judicious mixture of one kind with the other. Lime is an essential ingredient of all good soil, and one of the most powerful and valuable of manures.

Flower gardens do not require very strong manure, or any which is very offensive: dry withered leaves, old tanners bark, clean sand, a little lime, and dry cow dung may be used with much advantage.

CLAYEY SOILS

Are extremely sterile, unless mixed with other earths; because in wet seasons the plants become *inundated*, from the retention of moisture in the clay, while in dry weather the ground becomes so solid that the roots cannot penetrate. Digging, mixing in fresh manure, green vegetables, or *lime*, greatly improve it; burning it so as to render it friable, is frequently resorted to, and has a good effect in destroying wire worms and other insects.

SANDY SOILS

Being open, while allowing more readily the admission of heat and water, also permit them to be carried off more easily; hence rain and sunshine do them less permanent benefit than the more retentive soils. This is usually improved by adding clay, marl, and manure.

CHALKY LOILS

As well as marly, may be greatly ameliorated by the addition of various animal and vegetable matters, otherwise they are rather barren.

LOAMY SOILS

Are more fertile than any other; being less tenacious than clayey soils, can consequently be more easily improved, and at less expense. The loam near the sea coast is usually very rich.

Trenching, digging, draining, and levelling are all important.

PEAT SOIL.

Heath peat is that found on dry barren heaths, generally only a few inches thick of a black colour, with a mixture of sand.

This answers well for a hot culture, either by itself, or mixed with other soils. When used for beds of American plants, one-fourth part of fresh loam should be mixed with it. Bog peat is found in low marshy situations, frequently of considerable depth, without any mixture of sand. This description of peat is unfit for garden purposes in the state in which it is originally dug from such marshy grounds. It should be laid in heaps, or rather in flat beds, to have full exposure through an entire winter; and in such situation it will require to be frequently turned over to sweeten and become pulverized. When thoroughly friable, it is more valuable than heath peat, being, by the addition of sand, applicable to every purpose for which peat soil can be used, whether simply or compounded with more common soils. If peat of this description be laid over the common garden borders, to the thickness of three or four inches, and then very well worked in amongst the common earth to the depth of eighteen inches, it will be found to add greatly to its fertility for every purpose both of the kitchen and *flower garden*.

WHITE SAND

Is also of great utility to the florist, as one-fourth mixed with decayed leaf mould renders it similar to peat; and no unmixed soil will bear a comparison with *fine white sand*, for cuttings of myrtles fuchsia, rose, cistus, germanders, being more secure from mould and damp, which being the chief annoyance to plants under glasses, is most effectually counteracted by sand. Barren and sterile as sand may appear, there is no article of greater use in the propagation and culture, not only of shrubby plants but also of the more choice and delicate herbaceous kinds; that which is the *finest* and *softest* being invariably preferred. Many plants inclining to decay have been restored to their original vigour by the use of it, being admirably adapted for opening the pores of heavy, adhesive soils.

LIQUID MANURE.

One of the best liquid manures for flowers is cow dung, thrown into a large tub of water, so that, when stirred, it may tinge it of a good dark color. Liquid manures must be applied but *sparingly* to flowers, otherwise they will produce engorgement in the plants, from over-abundant nourishment, and do more harm than good.

Moisture is indispensable to vegetation: *dryness* is one of the most irremediable, and therefore the *worst* quality a soil can possess; for though too much moisture is *injurious*, it may be remedied by draining, while no assiduity in watering can ever supply the want of moisture.

COMPOST FOR FLOWERS.

The following valuable receipt was obligingly given by those eminent botanists Messrs. LODDIGES & SONS, Hackney.

Six parts of rotten dung, two fresh loam, one garden earth, one sand, well mixed and blended together. The longer it lies to mellow the better. A portion can be mixed with the common earth, in greater or lesser degree, according to the delicacy of the plants to be grown.

PLANTING.

In Planting, it is indispensably necessary for variety and contrast, to attend carefully to the height, as well as to the colour of each particular plant.

In beds, the highest plants may be placed in the middle, and gradually decreasing to the edge, the colours of which, if well selected, will produce great effect; for this purpose, *groups* are much better than single plants, unless, like the dahlia, they are of considerable size, or the Hydrangeas — very large showy flowers.

In borders the same order may be observed; but in narrow borders only, two or three rows of plants either in groups or single, will be admissible; in which case, plants of different heights may be alternately intermixed, so that there are no taller plants in front to hide those of humbler growth.

It is important to attend to the season when each flower comes into bloom, otherwise, many weeks may elapse with few or no flowers in blossom; but when a judicious selection is made for succession, and groups of these alternately distributed, a constant series of flowers may be maintained during the chief period of the year.

If there is no green-house, *cold frames* will answer for wintering almost every plant requisite for the flower garden in the Spring, provided the glass be covered with matting sufficient to prevent the frost from entering:—frames are requisite for raising the tender annuals in the Spring.

The following list was supplied by Mr. BROWNE, gardener to the Duke of Buckingham, at Stowe, to Mr. Paxton, for his Magazine of Botany, from which we have extracted.

PLANTS OCCUPYING THE BEDS IN SPRING.

- | | |
|---|---|
| 1. Hyacinths, of sorts | 13. Ten weeks' Stocks, scarlet and purple, turned out of pots |
| 2. Tulips, of sorts | 14. Viola, of sorts, Standard Rose in centre |
| 3. Narcissus, of sorts | 15. Long-seeded Evening Primrose, <i>Oenothera Macrocarpa</i> |
| 4. Viola, of sorts, Standard Roses | 16. Ranunculus, bordered with Snow-drops |
| 5. Crocuses, of sorts | 17. Tulips, bordered with Snow-drops |
| 6. Viola, of sorts | 18. Ten weeks' Stocks, scarlet and purple, turned out of pots |
| 7. Herbaceous Plants and Roses | |
| 8. Hyacinths, of sorts | |
| 9. Ranunculus, of sorts | |
| 10. Anemones, of sorts | |
| 11. Ten weeks' Stocks, scarlet and purple, turned out of pots | |
| 12. Herbaceous and Annual Plants | |

PLANTS OCCUPYING THE BEDS IN SUMMER AND AUTUMN.

- | | |
|--|--|
| 1. } Choice Dahlias, of all sorts | 11. Lobelia Erinus and L. Albus,
Standard Rose |
| 2. } | 12. Herbaceous Plants & Annuals |
| 3. } | 13. Ten weeks' Stocks, sown in
Spring |
| 4. Verbena Melendris, Standard
Rose | 14. Viola, of sorts, Standard Rose
in centre |
| 5. Calceolarias, of sorts | 15. <i>Oenothera Macrocarpa</i> |
| 6. Fuchsia Gracilis and F.
Microphylla | 16. <i>Campanula Pyramidalis</i> and
<i>Lobelia Fulgens</i> , mixed |
| 7. Herbaceous Plants and Roses | 17. <i>Campanula Persifolia</i> and
<i>Lobelia Splendens</i> |
| 8. <i>Heliotropium Peruvianum</i>
and Scarlet <i>Pelargoniums</i> | 18. Ten weeks' Stocks, scarlet
and purple, sown in Spring |
| 9. <i>Salvia Fulgens</i> & <i>S. Splendens</i> | |
| 10. <i>Salvia Fulgens</i> and <i>S. Involu-</i>
<i>crata</i> | |

GROWTH OF PLANTS.

Plants absorb their nutriment by the roots, this nutriment is then conveyed through the stem into the leaves; there, it is subjected to a process by which a large proportion of water is discharged; the rest is submitted to the action of the atmosphere, and carbonic acid is first generated, then decomposed by the action of light; carbon is now fixed under the form of a nutritive material, which is conveyed back into the system of the plant, for the developement of all parts of the structure; a proportion of the secreted matter is afterwards ejected from the plant. It was Mrs. Marcet, in her *Conversations on Vegetable Physiology*, who first drew the attention of practical gardeners to the fact of plants making an excrementitious discharge from their roots into the soil; thus opening a field of speculation that leads to important facts, as connected with the management of plants. This excrementitious matter does not appear to injure plants of other species, to any considerable degree; but it soon renders the soil unfit for the culture of plants of the same species, which will considerably deteriorate, if cultivated for above three or four years on the same spot. The Rose-tree offers a remarkable instance of this: it shoots out its suckers to a considerable distance, trying as it were to escape the already saturated earth, and draw its nutriment from an uncontaminated source. The same may be observed in all plants that ripen seeds and shoot out suckers; thus plainly indicating that they require a fresh supply of uncontaminated nutriment, which should be afforded them either by transplanting at the proper time, or digging away the earth as much as possible without injuring the roots, and giving a fresh supply of earth. It is therefore particularly advisable that soil, designed for the reception of flowers, year after year should be sweetened, or turned up to the influence of the frost and air: this is advantageous in all kinds of garden culture, but is more particularly attended to by florists, who repeatedly turn all their soils and composts, exposing them as much as possible to the action of the air and sun. This also shews the advantage of shifting the situation of the flower beds annually: thus, where Tulips blew one year, Carnations, or some other sort of flowers should be grown the next—avoiding by all means the retention of the same spot or bed, year after year, for the same sort of plants.

THE SHRUBBERY.

The Shrubbery is a style of pleasure garden of purely English origin; and while we read of the terrestrial groves and the terrestrial gardens of the Greeks, of the umbrageous bowers and flowery lawns of the Mahomedans, of the terrace gardens of the Egyptians, and of the hanging gardens of the Babylonians, it has been reserved to Briton's sons to adopt a noble boldness, without going to the harshness or abruptness of some of our continental neighbours; a style which may well claim the appellation of "beautiful."

In the formation of this style of garden, much must necessarily depend on the extent, situation, and character of the ground, the plantation of which should in some degree accord with the villa or cottage adjoining it. In laying out the walks, much effect may be given by the removal of a few feet of earth from one part to another, so as to form sloping banks, which may be greatly increased by judiciously planting the trees and shrubs, thereby giving an undulating appearance even to the level ground.

A shrubbery should be characterized more for the boldness of design apparently the offspring of nature and of chance, than of art or study, avoiding extreme abruptness, by a judicious admixture and blending of the plants; in fact, it should be planted as a

"Court or stage dress is ornamented,"

more for *general effect* than for particular or partial inspection.

One of the most important things is to attend particularly to the *shades* of green, especially when the view from the house or lawn catches the trees. Flowers, which Pliny calls

"The joy of trees,"

continue but for a short period in comparison to the duration of the foliage; therefore the more permanent picture should be executed by judiciously contrasting the various shades. Even the effect of perspective may be also considerably increased by the *proper arrangement of hues*.

Shrubs, whose leaves are of a grey or blueish tint, when seen over or between those of a yellow or bright green, seem to be thrown into the distance; those again with small or tremulous leaves, should wave over or before those with a large broad fixed foliage. The light and elegant Acacia, for example, has a more beautiful effect when its branches float over the firm and dark Holly, Sweet Bay, or Bronze Beech.

The most beautiful shrubs should be planted in the most conspicuous places; a projecting part should be reserved for the purple Rhododendron, the Azalea, and other similar species of American plants; also the hardier heaths, the same peaty soil suiting both species.

Much depends on the judgment in the skilful arrangement of the various kinds of Evergreens for relieving the monotony during Winter, which may be done by a tasteful distribution of the Aucuba Japonica and Golden Holly, or any of those with variegated leaves, or such as retain their brilliancy and berries during the cold months.

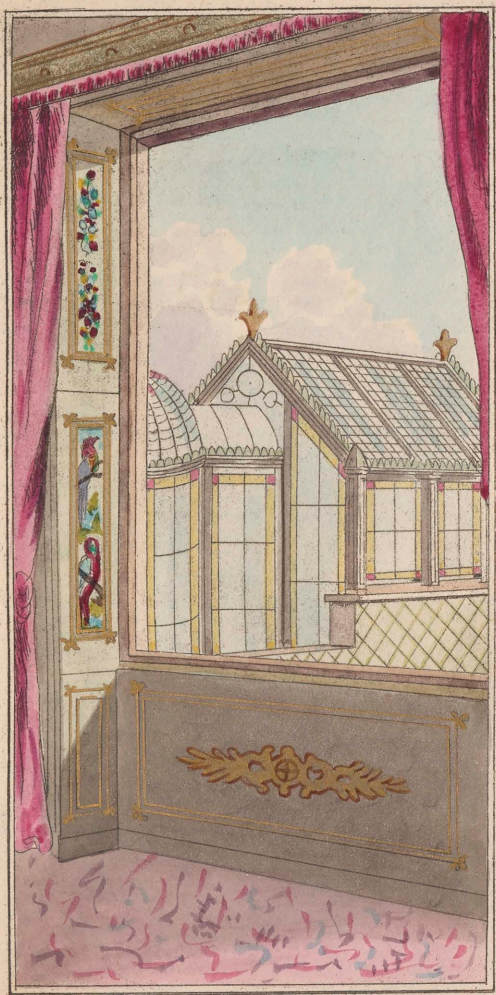
A well planted shrubbery depends not so much for its beauty on the expense or rarity of the plants it contains, as in the selection of sorts which succeed each other in blossoming throughout the year, or whose various coloured fruits grace them for the longest duration. It is not so much the shrubs, exclusively, for the ornament of the summer months, which alone require attention, but those which contribute to the gaiety of the morning and evening of the year; "so that the gloom may be banished *at all times as much as possible from the grove*, and Nature's repose shortened between the plaintive good night of Autumn, and the cheerful good morrow of Spring."

Mr. PHILLIPS recommends to plant the Hazel and Filbert as among the trees that blossom first, namely, about the middle of January. Even the Furze Bush (*Elex Europæa*) is a great enlivener of the shrubbery at this dull season, particularly when the golden blossoms are expanded at the foot of some dark-foliaged Evergreen. In March again, the leafless branches of the Almond are covered with delicate blossoms, while the Sloe may be made to contrast with these, its snow-white flowers rising from the midst of the dark dwarf Evergreens. In the same early month also the Dwarf Almond, the Mezereon, and the Japan Quince, will give life to the foreground, when planted in little groups of three or four each together.

VIEW OF A CONSERVATORY

From a Back Drawing Room Window.

This view is merely given to shew the double advantage of the "narrow covered way," by giving a "vista" to the appearance of the interior of the green-house, as seen from the landing, and thus improving the effect of the flowers by directing the eye to the plants in a concentrated form, so as to impart some degree of novelty and "character" to the "*coup d'œil*," while from the *back drawing room window*, the porcelain shelves in the conservatory and the flowers are seen to great advantage from the *projecting corner* of the green-house; and in London, so refreshing is the sight of flowers, that every effort of ingenuity and art should be put in force to obtain this gratification. If the engraved or engine-turned glass be used in the covered-way, the effect in the Green House will be very greatly increased.



J.T. Stockall, sc.

*View of Conservatory
From Back Drawing Room Window.*

THE GREEN HOUSE.

The cultivation of Exotic plants is admitted to hold the highest rank in horticultural science.

In the erection of the Green House or Conservatory, something depends on the extent and situation of the garden, as well as the taste of the occupier, but *much more* on the situation being exposed to the full influence of light and air, and as free as possible from the shade of trees and buildings. It is advisable that the front face the south, south-east, south-west, or any of the points of the compass which intervene. The success of the cultivation depends greatly on the position the house occupies between those extreme points; frequent failure arising for want of arrangement and adaptation of the structure to local circumstances.

It is generally admitted, that Wood is decidedly preferable to metal for the construction of the Green House, not only for economy, but also for durability. For general purposes, rather low houses are desirable, by which a greater portion of light and air is admitted, and greater advantage offered to the observer. In the

GLAZING

Much care is required that the glass be cut exactly to fit the rabbet, but not too tight; it should be cut on the curvilinear form, well bedded in the rabbet and the overlaps: coloured or black putty has the best effect. The advantage of puttying the laps prevents the breakage of the glass, by leaving room for expansion in time of frost, and also by having three solid bases to rest on. *The best crown glass ought always to be used.*

Various are the methods of

HEATING

now adopted, each plan having its many admirers—the several kinds of Flues, the Steam Apparatus, the Hot Water, and the Gas Apparatus; but we are decidedly favourable to Dr. Arnott's new invention, not only for economy, but also for utility and convenience.

Dr. Arnott's stove is so economical in fuel, that two or three pennyworth of that intractable smokeless substance *Coke*, will suffice to distribute heat regularly, without much attention on the part of the attendant, during twenty-four hours. This stove may be rendered not only an ornamental object, but is assuredly suitable in its *principle*, to green-houses and temperate hot-houses, where a moderate heat only is required. At the growing season, *moisture* may be diffused by placing a shallow trough, cistern, or Portland vase, in the green house. (These are made in Stone China expressly for the purpose, by Messrs. Copeland & Garrett.)

A discovery has just been announced which promises at a very trifling expence, not only to remove the unpleasantness of the smoke, but to render every particle of the fuliginous matter available to the production of heat, and thereby save an immense quantity of fuel.

The following letter on the Arnott Stove we have extracted from Harrison's Floricultural Cabinet.

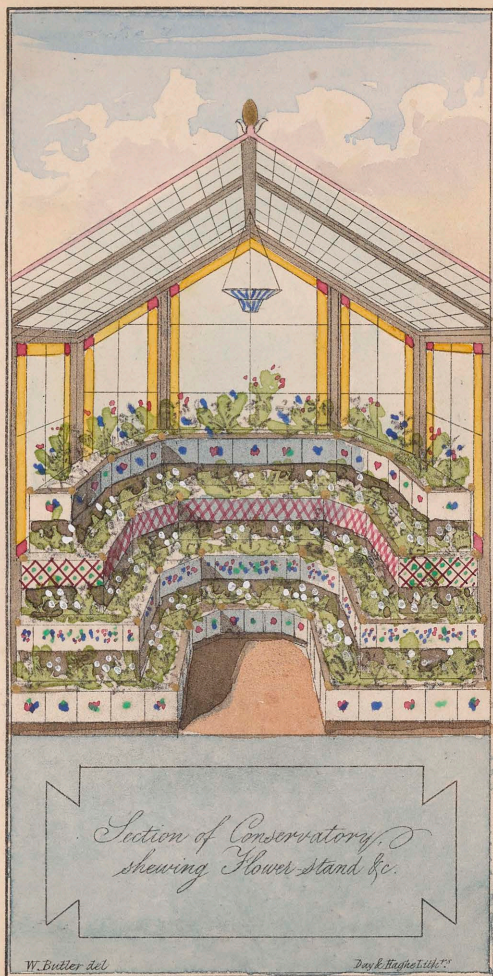
"I make no claim for classification with your scientific readers, nor can I describe myself as the owner of a forcing house; but having made many experiments with the stoves in question during the present and past winter, perhaps I shall not be charged with presumption in giving an opinion of their effects.

"From the end of last October to this time I have had an Arnott active in a room containing about fifty plants of various sorts, in pots, and judging from their present appearance, I am constrained to say, that the atmosphere has suited uncommonly well; indeed, the construction of the stove is such, (the fire not being permitted to touch any part of the outer case,) that I conceive it to be a difficult matter to heat the iron to a temperature sufficiently high to attract the oxygen from the atmosphere, except in a very slight degree, and even this may be obviated by placing an open vessel of water near the stove.

"With regard to adapting a hot water apparatus to one of these stoves, placed in an adjoining apartment, I do not hesitate to say, that from my knowledge of their construction, (derived partly from observation, and partly from communication with the original maker of them,) the plan might be effected with very little trouble by any gentleman having a little judgment in such matters, and assisted by a skilful operator."

PORCELAIN FRONTED FLOWER STAND FOR GREENHOUSE, WITH GROUND PLAN.

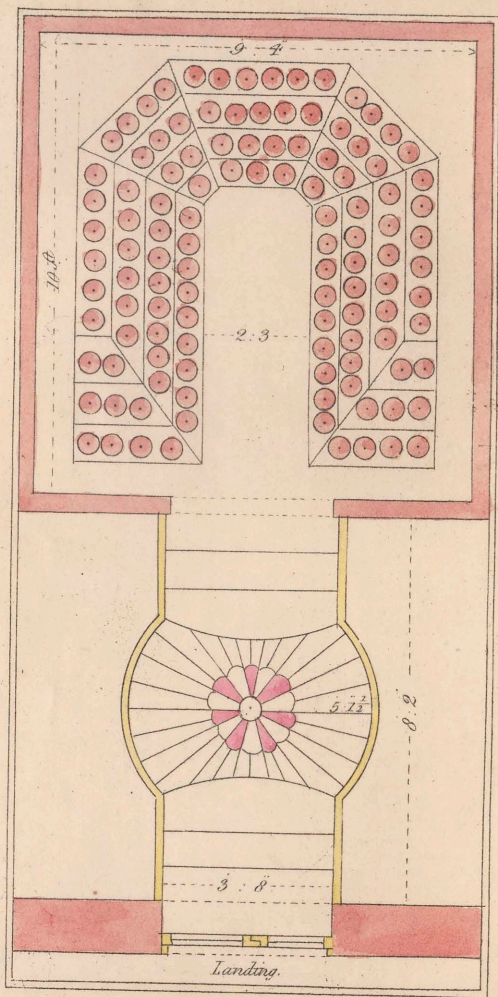
The annexed rough sketch of a horse-shoe octagon shaped flower stand in the green-house, is given to shew the advantages it presents in watering and inspecting the plants, as well as displaying them better and exhibiting the effect of contrast of the enamelled surface of the porcelain frontage of the shelves, with the varied hues and opaque leaves of the flowers. At first, the flower stand presented only three of the end fronts of an oblong octagon frame, which blocked up the entrance to the conservatory, and concealed the two long side shelves which contained the greatest number of plants. The present plan was adopted at the suggestion of the Duke of Devonshire, and the writer takes this opportunity of thanking his Grace for this useful hint—the ground plan gives the details.



*Section of Conservatory,
shewing Flower-stand &c.*

W. Butler del

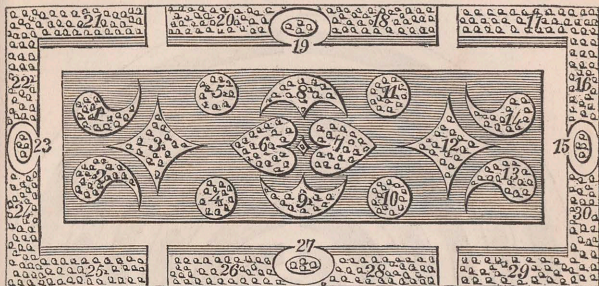
D. & H. Hughes Lith.



Plan of Conservatory. &c.

DESIGN OF A FLOWER GARDEN,

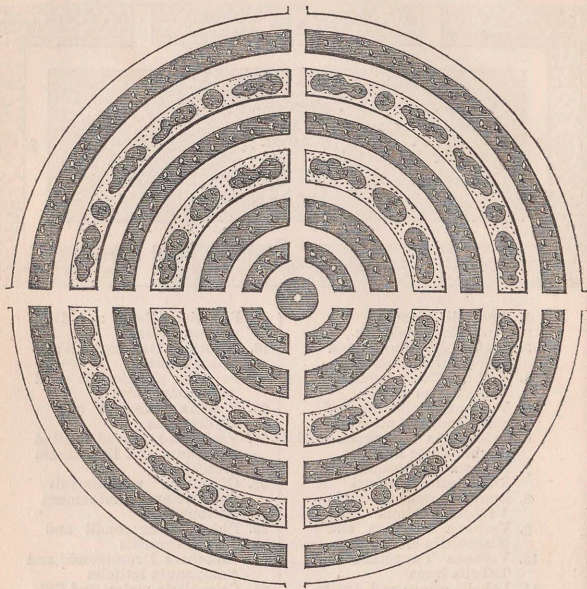
By Mr. DREWELL, with a list of plants for the various beds.



1. *Anagallis Monelli*
2. *Anagallis grandiflora*
3. Scarlet geraniums and *delphinium grandiflora*
4. *Verbena Drummondii* and *antirrhinum major*
5. *Verbena melindris* and double white *Antirrhinum*
6. *Calceolaria viscosissima* and double white Lilies
7. *Fuchsia Thomsonia* and *Delphinium Barlowii*
8. *Lantana Sellowii* and *Verbena aubletia*
9. *Verbena arranana* and *Elscholtzia crocea*
10. *Verbena Tweediana* and *Lobelia lutea*
11. *Lobelia erinus* and *Antirrhinum caryophylloides*
12. *Crassula coccinea* and *Heliotropium peruvianum*
13. *Verbena aubletia* and *Mesembryanthemum spectabile*
14. *Mesembryanthemum blandum* and *Petunia intermedia*
15. *Oenothera macrocarpa* and *Campanula gargania*
16. Double scarlet *Lychnis* and new white and other light coloured *Petunias*
17. *Fuchsia globosa* and *Delphinium sinensis*
18. *Oenothera Drummondii* and *Phlox cordata*
19. *Petunia phyllicaulis* and *Aster amelloides*
20. *Petunia phoenicia* and *Hydrangeas*
21. Variegated leaved scarlet *Geranium* and *Delphinium grandiflora*
22. *Oenothera missourensis* and *Mesembryanthemum floribundum*
23. *Phlox Drummondii* and *Petunia gracilis*
24. *Oenothera Drummondii* and *Campanula latifolia*
25. *Calceolaria majori* and *Calceolaria integrifolia*
26. *Phlox reflexu* and Prince of Orange geranium
27. *Tigridia pavonia* and *Nolana atroplicifolia*
28. *Delphinium grandiflora* and *Oenothera taraxifolia*
29. *Gladiolus psitticinus* and *Verbena Lambertia*
30. Brighton scarlet geranium and *Oenothera macrocarpa*

DESIGN FOR A CIRCULAR FLOWER GARDEN.

kindly sent to us by Mr. RUTGER, the able and well-known contributor to the "Suburban Gardener," "Gardener's Magazine," &c. &c.



Circular Flower Gardens may be considered as rather unique in design, as well as simple in their construction. The one here submitted as a specimen, is divided into zones. The circle in the centre may be either a mass of rock-work, or a bason, with a fountain for gold and silver fish. The zone nearest the centre is intended for an aquarium, and the remaining zones alternately for border flowers, and turf with clumps of various figures, laid down as taste may direct. Another mode of disposing of the circular borders may be effected by throwing them into a rosarium, or dahlia ground, or both; should the latter be adopted, the roses may be planted at such a distance from each other, as to admit of a dahlia between; and the flowering of the dahlias would admirably succeed the flowering of the roses. A third mode might

be that of a scientific arrangement, either Linnean or Jussieuean, in which case the clumps on the turf may be embraced in the arrangement; and if the zones of turf were widened, the clumps might be made large enough for the growth of small shrubs, such as Azaleas, Rhododendrons, Ledums, &c.

N.B. If the third bed from the outer one were raised about two feet by means of a wall of rustic or other work, and high shrubs planted in it, the plants in the beds both without and within gradually lowering, the effect will be greatly improved, and a pyramidal appearance given to the group.

ON SUCCESSION PLANTS FOR THE GARDEN.

One important feature in the garden, is the *production and maintenance* of a brilliant display of flowers, during the summer and autumn months.

In order to have the finest flowering annuals in full bloom as early as May and June, let the seed be sown in the month of January, such as *Nemophilla insignis*, *Collinsia grandiflora*, *Collinsia bicolor*, *Gilia tricolor*, *Gilia achilleæfolia*, *Collomia coccinea*, *Platystemon californicus*, *Eschscholtzia crocea*, &c. which may be maintained in dazzling array as late as October. When the display of these is declining, a second exhibition is produced by perennial plants, which are grown permanently in their compartments; such as *Enothera macrocarpa*, &c. which succeeds *Nemophilla insignis*, and others.

LIST OF SUCCESSION PLANTS FOR A FLOWER GARDEN.

The great secret in the management of a flower garden is to have an early abundance of things ready in pots, to turn out in the beds when the early flowers are beginning to fade.

In the Snow-drop bed plant Lily of the Valley, turn out from pots in course of time, into the Crocus bed,

Clarkia pulchella
Double blue Hepatica
Bed Calceolarias
Double pink ditto
Schizanthus
Scilla bifolia
Collinsia bicolor
Leptosiphon densiflorus
Pelargoniums
Hyacinth
Cacalia
Anemone
Clarkia pulchella alba
Polyanthus
Narcissus
Eutoca viscida
Ranunculus
White *Petunia*
Heartsease
Goodetia rubicunda
Lupine

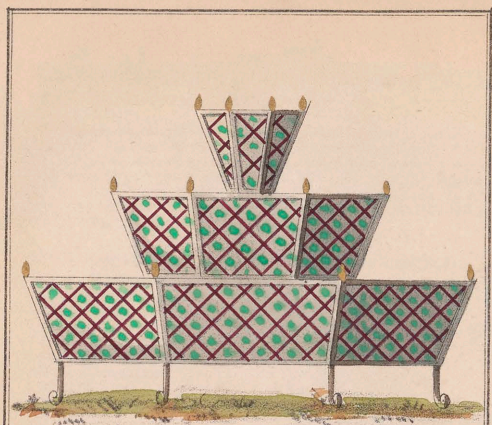
Mimulus cardinalis
Larkspur
Lobelia cardinalis
White Rocket
German Asters
Sweet William
Marvel of Peru
Clabanthus Arabicus
Marygolds
Pinks
Balsams
White Saxifrage
Clintonia pulchella
Roses
Coreopsts
Nemophilla insignis
Fuchsias
Bartonia aurea
Double *Jacobæa*
Scarlet Zinnias, in the same
bed as *Verbena Melindris*

LIST OF PLANTS FOR FURNISHING BEDS IN FLOWER GARDENS.

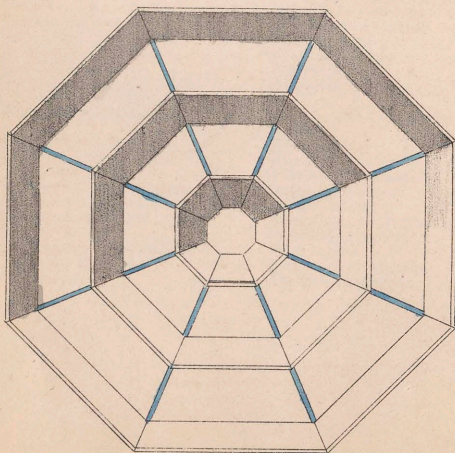
In the embellishment of a flower garden, great attention should be given to the contrasting of the tall and dwarf habited plants in their proper situation, so as to vary as much as possible the colour of the flowers in each of the principal beds. Standard perpetual rose, may be introduced; also a few showy herbaceous plants, such as *Phlox paniculata*, *Phlox alba*, *Phlox reflexa*, *Phlox Wheeleri*s *Phlox Browni*, *Phlox tardiflora*, &c.

List I. consists of two kinds of plants grown in each bed.

<i>Anagallis Monelli</i>	<i>Lotus Jacobeus</i>
<i>Anagallis grandiflora</i>	<i>Verbena Sabina</i>
<i>Scarlet Geraniums</i>	<i>Delphinium grandiflora</i>
<i>Verbena melindris</i>	<i>Double white Antirrhinum</i>
<i>Verbena Drummondii</i>	<i>Antirrhinum major</i>
<i>Calceolaria vicosissima</i>	<i>Double white Lilies</i>
<i>Fuchsia Thomsonia</i>	<i>Delphinium Barlowii</i>
<i>Lantana Sellowi</i>	<i>Verbena aubletia</i>
<i>Verbena Tweediana</i>	<i>Lobelia lutea</i>
<i>Lobelia erinus</i>	<i>Antirrhinum carryophylloides</i>
<i>Crassula coccinea</i>	<i>Heliotropium peruvianum</i>
<i>Verbena Lambertia</i>	<i>Mesembryanthemum spectabile</i>
<i>Mesembryanthemum blandum</i>	<i>Petunia intermedia</i>
<i>Oenothera macrocarpa</i>	<i>Campanula garganica</i>
<i>Double scarlet Lychnis</i>	<i>New white Petunias</i>
<i>Fuchsia globosa</i>	<i>Delphinium crinensis</i>
<i>Oenothera Drummondii</i>	<i>Flora cordata</i>
<i>Petunia phyllicaulis</i>	<i>Aster amelloides</i>
<i>Petunia phænicea</i>	<i>Hydrangeas</i>
<i>Variegated leaved, scarlet leaved Geraniums</i>	<i>Delphinium grandiflora</i>
<i>Oenothera missouriensis</i>	<i>Mesembryanthemum floribundum</i>
<i>Phlox Drummondii</i>	<i>Petunia gracilis</i>
<i>Oenothera Drummondii</i>	<i>Campanula latifolia</i>
<i>Calceolaria majori</i>	<i>Calceolaria integrifolia</i>
<i>Heliotropium peruvianum</i>	<i>Crassula coccinea</i>
<i>Verbena melindris</i>	<i>Istoma axilaris</i>
<i>Oenothera dispatosa</i>	<i>Beauverdia triphylla</i>
<i>Fuchsia conica</i>	<i>Oenothera speciosa</i>
<i>Brighton scarlet geranium</i>	<i>Hydrangeas</i>
<i>Bouvierdia triphylla</i>	<i>Petunia macrocarpa</i>
<i>Verbena incisa</i>	<i>Verbena Lambertia</i>



a.



FLOWER STAND.

List II. contains only one species of plants for each bed.

Anagallis monelli	Lantana Sellowi
Anagallis grandiflora	Verbena arranana
Scarlet geraniums	Crassula coccinea
Delphinium grandiflora	Oenothera macrapa
Verbena Drummondii	„ Drummondii
Double white Antirrhinum	„ missouriensis
Verbena melandris	Calceolaria majori
Calceolaria viscosissima	Esholtzia crocea
Fuchsia Thomsonia	Heliotropium peruvianum
Verbena Tweediana	Petunia intermedia
Double scarlet Lychnis	Delphinium crinensis
Lobelia lutea	Phlox cordata
Fuchsia globosa	Aster amelloides
Petunia phyllacaulis	Hydrangeas
Antirrhinum major	Oenothera speciosa
Petunia phœnicea	Calceolaria integrifolia

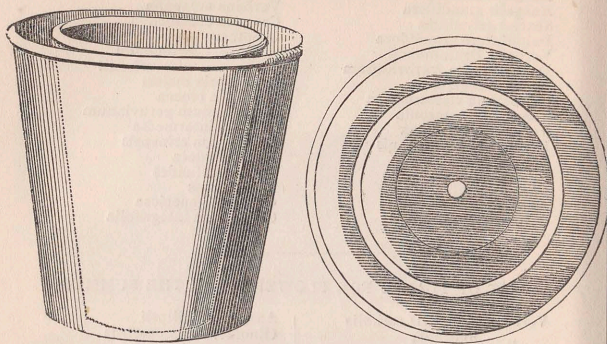
LIST OF PLANTS FOR FLOWERING IN THE SUMMER.

Verbena melandris ratifolia	Anagallis philipsii
„ multifida	Oenothera missouriensis
„ „ alba	„ taraxifolia
Merembergia calycina	Pink nosegay geraniums
Lobelia unidentata	Frogmore scarlet ditto
Verbena radicans	Prince of Orange and Princess
Lobelia erinus	Charlotte ditto, to be mixed
Tournefortia heliotropioides	Heliotropium peruvianum
Lotus jacobæus	Petuntias, of varieties
Lobelia axilaris	Senecia elegans
Nirembergia gracilis	Phlox Drummondii
Verbena Tweediana	Verbena venosa
„ incisa	Salvia chamædryoides
„ arranania	Alonsoa linarifolia
Anagallis grandiflora	

FLOWER STAND.

The annexed representation of a flower stand is one of the many combinations which the “running pattern” of the porcelain tiles of Messrs. Copeland and Garrett, renders so easy of execution. The frame-work is of light wrought iron, and the tiles secured by a narrow strip of tin above and below: if the stand is only wanted to present an ornamental front in *one direction*, then only half the octagon need be faced with tiles—a measure which will materially diminish the expence of the flower stand. This stand was made by Mr. Butler of the Edgware-road.

THE IMPROVED OR DOUBLE FLOWER POT.



Dimensions of the inner pot 8 inches, the outer one 11

The Double Pot is in the form of one pot inside another, fastened at the bottom so as to allow a hole for drainage, but leaving a space all round between the sides, of an inch or less in width to be filled up with water, or moss saturated with water, according to the nature of the plant potted.

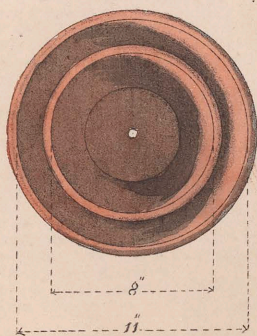
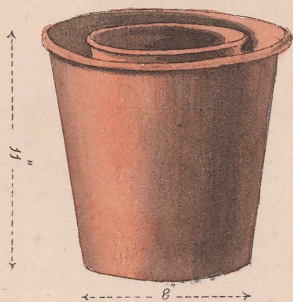
The essential benefit of the double pot must be at once perceived: the water between the pots always acting on the porous and succous material of the inner pot, thereby preventing it from absorbing the moisture from the mould as well as the greater part of the roots; they are particularly adapted for those plants which require a very *large* or an equally *limited* supply of water.

The plant seldom requires watering, except by syringing over the leaves, as the water is supplied to the plant by filtering through the inner pot gradually and constantly, at a due temperature in proportion to its requirement, and thereby preserving the plant from sudden destruction of drought, or heat, or saturation by water.

These pots, if placed on a common smoke flue or gas stove, have all the advantages of a hot water apparatus. If supplied with hot water at 65°, they retain the temperature without allowing the plant to be exhausted by the highly heated atmosphere, and obviate the incumbrance of a pit, if arranged on shelves near the glass; if required, the steam may be confined between the pots by a circular flat strip of zinc, cut through on one side, and bent at the edges so as to close over the rims.

If the rim of the internal pot be lower than the external, an excellent small tank will be formed for raising Lotus seeds and delicate aquatic plants.

There are some plants of course to which this method is inapplicable, but to many it ensures an indispensable means of obtaining



healthy luxuriance. It is well adapted to Hydrangeas, Lobelias, Cockscombs, Oleanders, Glosinias, &c. Also for striking cuttings between the pots,* which being filled with potsherds to within two inches of the surface, the remaining part with sand; for this purpose the inner pot should be empty, but holes must be provided in the bottom of the outer pot for the escape of water.

As these pots become known, we feel persuaded that their advantages will be appreciated, being so peculiarly adapted, not only for the green-house and the garden, but also for the room and the balcony. Porcelain cases or covers are manufactured for these pots by Messrs. Copeland and Garrett, the elegance of which adds greatly to the effect.

The common Double Pot is sold by Mr. J. Ashford, red potter, Clapham, Surrey, (near the Bedford Arms.)

Where economy is studied, the common pot may be placed in a brown glazed earthenware pan, about two-thirds the depth of the flower-pot, the vacuum between being filled with water as above; this will answer in many cases, but *not* all, some plants requiring the excrementitious rejection to be washed away, instead of being retained in the water, and thereby again forced into the compost in the pot. This will also apply to the common saucers for flower-pots, which should be frequently emptied.

ON GROWING PLANTS IN ROOMS.

Great care is requisite that the room be sufficiently light and airy; if the windows are in a suitable aspect to receive the sun, the plants will thrive nearly as well as in a Green House. During the fine weather in Spring and Autumn, they may be placed in the open air during the night, and replaced in the room in the morning; the night dews contributing greatly to their health and vigour. Injudicious watering does much injury to plants, especially in rooms; an overplus of water will show its bad effects by a very dark colour; and if too little, the leaves will turn yellow, and eventually die.

The soil in the pot should always be allowed to have the appearance of dryness (but never sufficient to make the plant flag,) before a supply of water is given, which should then be copious; but always empty the pan or feeder in which the pot stands as soon as the soil is properly drained. The water should always be about the same temperature as the room in which the plants grow; never use it fresh from the pump, either let it stand in the room all night, or take off the chill by adding to it a little warm water, otherwise the growth of the plant will be much checked.

When filthiness is collected on the leaves, arising from insects or dust, the destruction of the former may be ensured by placing the plants under a hand-glass and burning some tobacco till they are enveloped in the smoke; the latter may be removed by a syringe, or with a sponge if the dirt still adhere.

As so much depends on the nature of the soil in which plants are potted, the following remarks will be found generally correct:—all

* Messrs. Copeland and Garrett have just made some pots expressly for this purpose, but the centre space is in this case very much smaller, without any draining hole, in order that the water may be retained in the middle pot, whilst the cuttings are planted in the outer space; the whole being covered with a mitre-shaped glass, or open pottery (perforated for air.)

plants whose stems and branches are fragile and slender, the roots fine, thready, fibrous, as *Diosma*, &c. require peat earth and similar treatment to Cape Heaths.

Those whose wood and habits partially differ, and whose roots are of a stronger texture, as *Ardisia*, &c. require a portion of sandy loam, in many cases about equal parts.

Almost all Cape and other bulbs, as *Sparaxis*, &c. &c. thrive best in rich sandy loam, without a mixture of peat.

Shrubby and herbaceous plants with luxuriant roots and branches, as *Myrtus*, &c. require rich loam lightened with leaf soil, without peat.

Plants with powerful roots and but slender heads, as *Veronica*, &c. require a light sandy soil, with a small portion of leaf mould, and very rotten dung. At time of potting, lay plenty of potsherds at bottom of pot, to give a good drainage.

Many of the *Orchidaceæ* plants are parasitical, and require a portion of decayed wood to be mixed with the soil; others grow in damp moss; these being chiefly stove plants they will not flourish in a room. There are several genera that do well both in the Green House and in the room, as *Arethusia*, &c.; soil suitable for these, is a mixture of light sandy loam and peat; very little or no water must be given when they are not in a growing state.

Succulent plants, as *Cacalia*, &c. require very little water, and thrive in a mixture of sandy soil and lime rubbish; others, as *Caris*, &c. grow well in a mixture of peat and loam.

The Double Pot will be found peculiarly adapted for plants in rooms.

ON THE CULTIVATION OF PLANTS IN THE WINDOWS OF LIVING ROOMS,

Showing their tendency to promote health, with their poisonous effects when introduced into sleeping apartments.

Extracted from Marnock's Floricultural Magazine.

"Very much has been said about plants in windows, some asserting their tendency to injure health, and others the contrary. There is one point, however, in which I think all will agree, and that is, their beautiful appearance. Whether in the splendid halls and drawing-rooms of the wealthy, or in the humble cottage of the poor, there can be but one opinion respecting their appearance. What artificial splendour can compete with a number of handsome flowering plants in the windows of our rooms? Certainly none. Their beautiful green leaves, contrasted with their blossoms of various forms and colours, present an appearance altogether beyond the reach of art; and during the winter months, when the ground is covered with snow, and the gardens present an appearance more of desolation than of beauty, the trees all leafless, and the flowers cut down by the frost, then what a feast is presented by plants blooming away in your house, (heedless of the chilling blasts without,) enlivening the dreariness of winter, spreading an odoriferous perfume through your apartments, and rivalling in beauty many of those tender kinds, who only delight us with their fragrant flowers during the genial summer weather, not able

to bear up against the chilling and frosty air of winter. With regard to the choice of flowers for windows, of course, that is a matter of taste, but for the cottager, I think, he will find the Fuchsia, Hydrangea, Chinese primrose, Cactus speciosa, and monthly roses, to be not only cheap but elegant additions to his apartments.*

We will now proceed to consider the principal question on the subject, viz. : are they beneficial or injurious to health? and I shall endeavour to show clearly and upon philosophical principles, that in moderate quantities they are *decidedly healthy*. Our atmosphere is simply a mixture of oxygen, or vital air, (so called because no animal can live without it), and nitrogen, (called also azotic gas, because it would immediately deprive any one of life, who was to breathe it) with an exceedingly small quantity (about 1 part in 1000) of carbonic acid gas, which is also poisonous, and of course several adventitious substances, such as watery vapour, &c. Now in breathing this atmospheric air, man, and all other animals retain the oxygen which enters into the blood, and return the nitrogen, which being lighter than the air, ascends and waits for fresh combinations; thus man deprives the air of its constituent which supports life, and returns the poisonous part; on the contrary, plants (not flowers only, but plants generally,) give out during the day a large quantity of oxygen, which combining with the nitrogen which man exhales, *preserves the equilibrium*, and *reforms atmospheric air*. Here, then, we see that "the plant purifies what the animal had poisoned." The loss of the vast quantity of oxygen which is absorbed by the breathing of animals, would soon render the air totally unfit for our use, if the Almighty Framers of the universe had not in his infinite wisdom appointed an antidote in the vegetable creation. This is, I think, a sufficient evidence that plants in rooms are *decidedly healthy*, but when I state this, I must also assert, that in *bed-rooms they are exceedingly deleterious*, as during the *night*, many plants give out carbon instead of oxygen, and by that means instead of purifying the air *help to poison it*. The fact that man exhales air unfit for being re-breathed, is too clear and generally admitted, to need an experiment; but perhaps it may be as well to mention one, as some readers of this article may be sceptical on this point, to shew that during the day, plants give out oxygen; I therefore select the following from Parke's Rudiments of Chemistry:—"Invert a glass bell full of water in a flat dish of water, and introduce leaves under it. Expose the apparatus to the sun's rays and very pure oxygen gas will be disengaged, which will displace the water in the glass and occupy its place. In like manner, a sprig of mint corked in a small portion of carbonic acid gas, will render it capable of supporting life. Thinking, as one of our present authors writes, that "*Floriculture is amongst the most innocent and humanising of all pleasures*," and that "*everything which tends to diffuse such pursuits amongst those who have too few amusements, is a point gained for happiness and for virtue*," I consider it a duty which I, as a

* Agreeably with a suggestion of our much valued Correspondent, we might add many others to his list; but, in the successful cultivation of plants in windows, far more depends on care and attention than on the kind of plants. Those which an experienced cultivator would regard as tender, are yet, when placed under the care of fair and attentive cultivators, often seen to display a degree of rich luxuriance, and a delicacy of tint both in flower and foliage, that may be sought in vain in the greenhouses of the wealthy.

Floriculturist, owe to my favourite recreation, to endeavour to remove that prejudice which so generally exists against flowers in windows, by showing, that (*except in sleeping apartments*) it is destitute of foundation; and further, by proving on chemical and philosophical principles, that they are not only *interesting and beautiful*, but *actually conducive to the salubrity of the atmosphere.*"

ON PURCHASING WINDOW PLANTS, AND METHOD OF KEEPING THEM IN ROOMS.

Those who are fond of having plants in their windows, are often disappointed in their wishes, by the want of a little knowledge and a little care; for though the plants which they purchase appear in fine condition when purchased, they frequently begin to fall off at the very time when they ought to come into full flower. One obvious cause of this is, the different circumstances they are placed under by the purchaser, to what they had been when in possession of the nurseryman; and still more, the very different management to which they are subjected.

In purchasing flowers in pots, it is important to recollect, that by far the greater number of them have been forced into a premature display of their beauties by artificial heat and shelter, which renders them full of sap and tender, from the branches and shoots not being ripened. The colour of their leaves is of a peculiar shade of green, which, from the abundance of their juices, appears not unhealthy; but though it may appear fresh, it is *much paler than plants which have grown in the open air* and exposed to the variations of the weather. Another important circumstance is, that the nurseryman's green-house always has light perpendicular, as well as on both sides, so that his plants grow upright, and send out branches on all sides, forming what is termed a well balanced head.

Now when a plant which has been thus reared is transferred to the inside of a room window, or to a flower-stand in a sitting-room, it is at once deprived of its customary perpendicular light from the roof of the green-house, as well as two, if not three, of its side lights; that is, it only receives light on one side, to which it will soon bend, till its upright growth is spoiled, and the balance of the head is destroyed by the branches receiving the front light far outgrowing those which are behind them. When this is first observed, the bending of the plant is attempted to be corrected by turning the back part to the front; but this, so far from answering the purpose, not only gives the branches unsightly curves and twists, but *greatly weakens the whole plant*. It is much better to let the tendency of the boughs to the light operate always in the same direction, *till the whole assume the spread, fan-like position which is the only natural one for window plants having no perpendicular light*—it being impossible in such cases to grow plants with well-balanced heads.

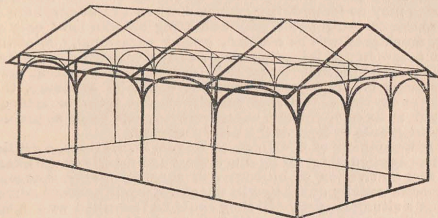
It is also very important, on purchasing plants in pots, at first not to expose them out of doors, either all night or to bright sunshine. The cold of our nights, even far in the summer, will often injure, if it do not kill, plants not gradually inured to it: while the bright sunlight of a summer's day will often wither or kill plants which have previously had only the tempered light of a green-house.

With respect to watering, in cool moist weather, it is very generally overdone, and the plants are rendered dropsical and sickly, by having the mould always soaking wet; whereas, in dry summer

weather, they are as generally under-watered,—for in *such weather, the effects of one watering, particularly in small pots, and more so when these are new and porous, will disappear in a few hours.* Many plants, in such circumstances, would require to be watered *at least twice, if not thrice a day.* The greatest care ought always to be taken to have the pots so drained with broken potsherds, as that no water may stagnate, and for this reason all pans with standing water in them should be prohibited.

THE PROTECTING TENT,

For preserving Exotic Plants during the Winter Season.



In a valuable work recently published, entitled, "The Green House," by Mr. McINTOSH, we observe an article on a structure called the "*Protecting Tent*," intended to shelter Exotics during the winter season. This structure is recommended to those who do *not wish to incur the expense of a glass erection*, but are nevertheless desirous of cultivating a few exotic plants.

The frame may be made of any dimensions, according to the size required: the piles should be fixed in the ground at regular intervals all round the bed for the purpose of supporting the frame work which is erected over it; and as it is desirable that the latter should be easily removed, the supporting posts should either be fastened by the means of hooks or rings attached to the lower piles; the upright supporters should be from three to four feet apart, with a span roof, the whole of which may be as slender as possible consistent with the safety of the fabric.

This frame being of a portable nature, may be placed on or off the bed at pleasure. During the summer months it can be entirely removed, and replaced on the approach of winter. The roof may be covered with tarpauling, or tarred canvas, which will effectually throw off the rain, while mats, or similar light material, may be brought along the sides, to be opened or entirely removed as the weather will permit. If the frost be very severe, the whole erection may be covered with tarpauling, and over this, if necessary, any other substance may be placed. Pullies may be attached to the top of the erection, by which the canvass may be allowed to slide off when the weather will permit.

Great care is necessary in the choice of situation, which should be well sheltered from winds; but at the same time freely and fully exposed to the genial influence of the sun.

The formation of the bed should be according to the nature of the

plants intended to be grown, varying in different parts to suit the diversity of plants, likewise in depth, according as the plants are bulbous, herbaceous, or shrubby: the latter of course requires a considerable depth of soil, while for the former a shallow and well-drained compost is indispensable. To ensure a due circulation of water, the bed in which the plants are to be placed, should be elevated a foot or more above the surface, and if necessary, effectively drained beneath.

One of the most obvious difficulties is the selection of plants suitable. Exotics (particularly evergreen,) are frequently injured even in green-houses, on account of the insufficiency of light during the winter season. In how much greater proportion must this injury be, where the light is necessarily almost wholly excluded? To meet this difficulty great attention will be required. The whole of the covering may be temporarily removed when the atmosphere is dry and above freezing point. By admitting air and light only at the sides, much good will be effected, but by occasionally allowing the plant a few hours' full exposure, more advantage will be derived than would result from being only partially uncovered at the sides for as many days. In regulating this degree of exposure, the humidity or dryness of the external atmosphere must be attended to as much as its temperature, excessive dampness being as prejudicial to exotic plants as frost in the winter months.

It is the opinion of the Hon. & Rev. Wm. Herbert, a gentleman who has applied his great talents almost exclusively to the examination and cultivation of bulbous and shrubby plants, that many of the species usually cultivated in the stove, would succeed admirably in such a situation, provided they could be furnished with a bottom heat in the summer, which might be effected by subterraneous flues or hot water pipes. During the winter the heat derived therefrom might be applied to other purposes: nothing more being necessary than their preservation from damp and frost, which may be easily done by covering them with the tarpauling.

With a little care, there can be no doubt that many of our Exotic plants would attain great perfection, and flower most abundantly in the summer, while the novelty of their appearance in the open ground, when divested of every trace of their winter covering, would contribute greatly to the charms of the pleasure ground.

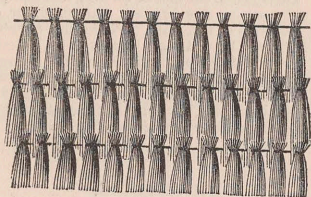
There is one principle necessary, and which must not be lost sight of: that is, of covering the frame or erection at an *early* period every evening during the decline of the autumnal season: by this means not only will the early frost be guarded against, but the heat of the ground being much greater at this season of the year than the air, is thus prevented from evaporating; the plants are retained in their accustomed health and beauty much longer than they would otherwise be, and their branches and buds have a much better opportunity of arriving at a state of maturation previous to their powers being suspended. Care must be taken to make a judicious selection of good flowering plants sufficiently hardy to bear 4 or 5 degrees of frost. The following are a few that will thrive well, to which many others may be added.

Erica, several species; *Linum Tigrinum*, *L. flavum*, *Phlomis*, *Leonurus*, *Arbutus Longifolia*, *Donia glutinosa*, *Leptospermum*, several species; *Hypericum*, several species; *Lavandula dentata*, *Polygalæ*, several species; *Buddlea salicifolia*, *Aster reflexus*, *A. argophyllus*, *Cistus*, many species; *Magnolia annonæfolia*, *M. conspicua*, *M. fuscata*, *Salvia*, several species; *Psoralea*, several species; *Sutherlandia frutescens*, *Fuchsia*, all the species;

Acacia, several species; *Illicium floridanum*, *F. anisatum*, *Cheiranthus*; also several species of *Tenerinum*, *Convolvulus*, *Cineraria*, *Myrtus communis* et var., *Banera rubioides*, *Paeonia montan*, *P. Papaveracea*, *Indigofera*, *Lavatera*, *Edwardia*, *Genista*; *Correa alba*, *Malva*; *Pittosporum*, *Mesembryanthemum*; *Lonicera*, *Hibbertia*, *Ononis*, *Verbena*, *Aurthyllis*, all the genus of *Agapanthus*, many Cape species of *Geranium* and *Erodium*; *Azalea indica*, *Daphne odora*, *Medicago arborea*, the Nepal *Rhododendrons* and tender English *Hybrids*, &c.

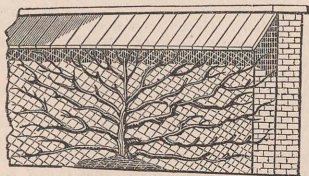
PROTECTION FROM FROST.

Great protection will be afforded to plants, if near a wall, by the following very simple method.



Tie together small handfuls of Straw, say perhaps forty in each, suspend them on lines before the plants or trees, letting one line overwrap the other as represented above. Small branches of birch, beech, or fir may be used instead of suspending it on cords in the same manner.

A neater practice is found in the use of Woollen Net.



This article is wove for the purpose, of a mesh from half an inch to an inch square. If a board of two feet wide be affixed to the top of the wall, in a roof-like direction, and the net be fastened to its edge, and extended thence to the foot of the wall, a neat and efficient protection will be afforded, and no disfigurement to the most ornamental garden.

SHRUBS AND DECIDUOUS PLANTS.

Ornamental shrubs, whether evergreens or deciduous, are very numerous, and much cultivated; they possess great beauty and require care and attention in their management.

Many flowering shrubs are natives of North America, and thrive best in a peculiar sort of soil, which may thus be formed for them:—Remove one foot of the natural soil, and replace it by the turfy soil on which heath naturally grows. Peat, or bog soil, is not at all suitable; but in the absence of heathy turf, a good substitute may be formed of leaf mould and fine white sand mixed. When a plat is thus formed, it is called an *American clump, or border*. In planting shrubs, open for every plant a circular hole, wide and deep enough to receive the root freely, and let the bottom be well loosened. Then prune the end of all long and straggling roots, cutting away all such as are broken, damaged, or dead; also prune any irregularities of the head. Place the shrub upright in the hole; break the earth well, and throw it in equally, shaking the plant gently, to make the earth fall regularly among the roots and fibres. When the roots are well covered, tread the earth gently down round the plant; and when all the earth is restored to the place, finish by watering, which must be repeated for several days, according to the nature of the soil, the weather, or the character of the shrub.

GERANIUMS.

Few genera of plants exhibit more fully the industry of the cultivator, or demonstrate more clearly the controul he exercises in producing varieties; so numerous are they that there are about three hundred recorded species, and above five hundred sub-varieties.

This deserved favorite requires a light soil, containing a mixture of loam and a little well rotted manure; if placed in pots, care must be taken that they be *sufficiently large* to allow the root to expand, by which the flowers will attain a much greater degree of vigour and perfection. Geraniums may be propagated by seed, which is generally produced in July: it should be gathered when ripe, and immediately sowed in a pot, and plunged into a hot-bed or under a glass: in about three weeks after coming up, it should be potted separately, and by autumn will be fine plants, *superior* to those raised by cuttings.

In striking cuttings, they should be potted early, that they may gain strength to bear the winter. Young plants invariably flower the best; therefore to procure them, cuttings should be taken at the junction of the old and new wood, just below a bud, as it is out of this bud that the root will strike.

A rather warm situation is desirable to facilitate their growth, or under a hand-glass; they require a moderate supply of water, too much will rot them: they require much protection from-the frost during the winter.

If the cuttings are put in the open ground, they must be shaded with a mat during the heat of the day; many of the leaves (not

all) should be taken off, and all flower buds carefully removed. They will speedily begin to grow, and when they are well struck they should be placed in separate pots, and housed at the first approach of frost, when they will be ready to supply the place of those which may be killed by the winter. Some hardy plants will live through a mild winter under a south wall, if matted. Another way of preserving *large Geraniums* during the winter is often practised with success. As late as may be in the autumn, when the frost may be inclined to set in, take up such *Geraniums* as are *too large to re-pot*, tie a string round the main stem, and hang the plant roots upwards, in a *dark cellar* where the frost cannot enter. In April or May when the frost is over, replant them, cutting down nearly to the roots, and they will speedily shoot out and attain a great size. This is *not* said to be *infallible*; some of your plants, may be lost by this method, but *ALL will be*, if left exposed.

The following list of *Geraniums*, with the prices affixed, will be found useful.

	s. d.		s. d.
Alicia, Foster's ...	3 6	Foster's Viola ...	42 0
Albion ...	2 6	„ Vivid ...	42 0
Alarm ...	5 0	Gaines's King ...	42 0
Amato, Sainsbury's ...	42 0	Garth's Fanny Garth ...	42 0
Amabile splendens ...	2 6	„ Joan of Arc ...	84 0
Beauty of Ware ...	3 6	„ Perfection ...	21 0
Bellissima ...	3 6	„ Rouge et Noir ...	3 0
Bride ...	3 6	Garth's Standard ...	2 6
Cassius ...	2 6	„ Una ...	63 0
Chef-d'œuvre ...	7 6	„ Victoria ...	42 0
Climax ...	7 6	Gem ...	2 6
Colossus ...	2 6	Hector ...	2 6
Corinna ...	2 6	Helen M'Gregor ...	5 0
Criterion ...	5 0	Iantha ...	2 6
Domtesse Bathaney ...	21 0	Invincible ...	15 0
Dennis's Perfection ...	2 6	Isodorianum ...	3 6
Diadematum Superbum		Jehu ...	10 6
Novum ...	3 6	Jubilee ...	3 6
Diomede ...	2 6	Julietta ...	3 6
Duchess of Sutherland ...	10 6	King Rufus ...	21 0
Duke of Devonshire ...	3 6	Lady Denbigh ...	2 6
Dulcinae ...	10 6	Lady Jane Peel ...	21 0
Duvernay ...	21 0	Lady Murray ...	5 0
Fair Rosamond ...	5 0	Lady Nitshdale ...	3 6
Fosteria Rosea ...	7 6	Lineatum ...	10 6
Fosterianum superbum ...	21 0	Louis ...	3 6
Foster's Adela ...	10 6	Lord Bradford ...	21 0
„ Bleda ...	7 6	Lord Rodney ...	2 6
„ Eliza ...	3 6	Louis Philip ...	5 0
„ Faunus ...	10 6	Lucifer ...	2 6
„ Glowworm ...	42 0	Maiden Queen ...	21 0
„ Imogene ...	15 0	Miller's Adonis ...	2 6
„ Jewess ...	42 0	„ Splendissimum ...	3 6
„ Maid of Athens ...	2 0	Miss Annesly ...	2 6
„ Niobe ...	15 0	Montgomeryanum ...	7 6
„ Prima Donna ...	42 0	Moreton's Caroline ...	7 0
„ Queen Superb ...	21 0	Mrs. Standert ...	21 6
„ Vesta ...	42 0	Nosegay ...	2 6

	s.	d.		s.	d.
Paragon	7	6	Sir J. Broughton	2	0
Parker's Triumph	7	6	Speculum Mundi	2	6
Priam	3	6	Unique	10	6
Prize Beauty	5	0	Vandyke	7	6
Queen Mab	10	6	Village Maid	3	6
Rebecca, Hill's	3	6	William of Windsor	7	6
Sidonizæ	7	6	Zelina	3	6

ROSE, [THE]

This universal favorite of Nature, the ornament alike of the cottage and the parterre, which Moore has so charmingly described :

"Rose ! thou art the sweetest flower,
That ever drank the amber shower,"

is divided into many classes, and contains perhaps more varieties than any other flower; the Cabbage, the China, the Scotch, &c. each requiring a very different treatment. All roses thrive best in a rich loamy soil: owing to their throwing off a great quantity of excrementitious slime, they require to be *moved at least once in three or four years*, or the plants will deteriorate, and not produce fine flowers. The Cabbage or Province roses, the French and Moss, are all to be treated in the same manner; and whether kept as dwarfs or standards must be annually pruned. To keep roses long in flower, gather the flowers as fast as they fade close to the stem, nipping off any hips that may form.

The China (unlike all others) will not only bear upon the old wood, but sends forth a shoot from the ground, which will blow the same year.

Rose-trees of any sort may be removed in February and March, and blossom the same year. By transplanting them in April and the beginning of May, giving plenty of water till they are fresh rooted, a bloom is obtained in July, August, and September.

Standard roses are now very much cultivated. In some cases a leading shoot is trained to a stake, (the plant being divested of all its branches) at four or five feet high it is topped, and then allowed to branch out into a head, which is kept *closely* pruned. They may also be obtained, by budding the sort desired on young stocks of the Dog rose, or Sweet brier, which have been placed in the desired situation the year before, by which means they will be well established.

If care and attention is paid to the pruning so as to form a uniform and compact head, they are among the most beautiful objects of the garden. When in flower, each will present the appearance of a dense cluster of blossoms, and occupy but little room; they however require support by a stake, entirely removing all suckers. The young shoots should be annually cut to within two or three inches of the part they started from; and when the head becomes too large, some of the old wood must be cut out, allowing the young shoots to supply its place.

All Roses require great attention in *pruning*, except the China; if this is *neglected*, the plants will speedily degenerate, and the stems become bare: it is a mistake to think that by closely pruning, the number of flowers will be lessened, on the contrary, more and finer flowers will be produced. The shoots, however, must not be uniformly cut to within a short distance of the stem; but the strong and vigorous shoots should be annually shortened to within six inches of the base, while slender and weak shoots should be cut to within three or four inches; young suckers, not required for layering, should be pruned down to within six inches of the soil, to supply the place of the old wood, which should be cut out: when suckers are too numerous, they should be eradicated.

Pruning should be performed in March.

The China Rose will submit to but little pruning: their shoots should never be shortened, for those that are pruned, generally die; but after the shoots have flowered two or three years they must be cut out, as abundance of young shoots are produced annually, and these always flower most abundantly. Several sorts of insects infest the Rose; the best way to get rid of them is to pluck off the leaves or flowers affected, and burn them. The green fly must be destroyed by fumigations with tobacco smoke.

Roses are propagated by layers. The China by cuttings, which strike under a hand-glass; this should be done early in the spring.

In layering Roses, and other shrubby plants, it is only necessary to run a penknife through the shoot to be layered, at a bud or joint; having slightly twisted the shoot, so as to open the bark, bury it about three inches below the surface of the soil, treading the soil slightly round it, so as to place it almost erect.

Rock Roses and Sun Roses cannot be placed in too exposed a situation, as they grow naturally on open moors or rocks, and seem to delight in receiving the full power of the sun's rays. They will thrive in any poor soil which is not retentive of moisture; and if pieces of rock, soft stone, or chalk are mingled with the soil, the plants will thrive and flower much better. These plants are exceedingly ornamental, producing a great abundance of flowers, are of very dwarf habits, and consequently suited for small gardens.

The Climbing Rose, which will thrive in almost any kind of soil, is one of the prettiest ornaments for a bower or trellis work, and may also be trained up straight trees.

In a well arranged catalogue of Roses, by Mr. T. RIVERS, jun., of Sawbridgeworth, are some useful observations on this universally admired genus. As a few of the ideas are original, we shall give them further publicity. He says: "I still think that in unfavourable soils, Roses require being removed, and their roots trimmed every third or fourth year. In cold clayey soils, the best compost for them is rotten manure and pit sand; in warm dry soils, cool loam in lieu of sand. Annual pruning, which is quite essential, should always be done in October or in March; but October pruning will be found greatly advantageous as the Rose will then prepare itself during the remainder of the autumn for vigorous growth in spring."

NOISETTE ROSES IN BEDS.

Mr. MARKHAM's method of originating gay rose beds, and prolonging their beauty, has already obtained numerous followers, which, be it remembered, is not applicable to the slow growing deciduous Roses. It is equally suitable to a single bush of the Noisette, as to a whole bed. The distance at which the Noisette Rose is first planted in beds, may be considered of little moment. The stock of plants and space to be covered, may be admitted to govern the regulation of distance. If planted pretty numerously, the bed may at once be covered; but if widely apart, layers may be put down, either in spring, or about midsummer, to fill up vacancies to any reasonable extent. If young shoots be pegged down beneath the soil in summer, and its surface protected from drought by a little half decayed hot-bed manure, they will strike root most readily. *One scrap of knowledge should have a place in the minds of all lovers of roses; which is, that the soil in which they are planted can scarcely ever be made too rich, and that most frequently it is by far too poor.*

CHOICE ROSES OF THE ZOOLOGICAL GARDENS,
REGENT'S PARK,

Selected during the time of their full floration, 1838.

Grande Lamarke, purple; large Blush, blush; Duke of Devonshire, purple tinted blush; Rosa Poilpret, (Hybrid China) beautiful blush; Point Pourpre, purple; Paillarda, very, very rich pink; Jessica, pink; Royal provence, not a standard.

A LIST OF STANDARD ROSES,

With general prices affixed.

Mossy Pomponne and De Meux	0	5	0
Brennus or Brutus	0	3	6
Jaune Desprey, Noisette	0	5	0
Moss Scarlet, (low Standard)	0	3	6
Crested Province or Moss	0	5	0
Neplus Ultra	0	3	6
Black Tuscany	0	3	6
Princess Augusta	0	3	6
Geo. the 4th	0	3	6
William's New Double Yellow Briar	0	5	0
Rose du Roi	0	3	6
Globe White Hip (low Standard)	0	2	6
Madam Hardy ditto	0	3	6
Malton or Fulgens ditto	0	3	6
Henrietta Campan	0	3	6
Madam Desprey or Bourbon	0	3	6
Duke of Devonshire	0	3	6
Louis Philip, perpetual	0	5	0
Noisette pulchella	0	3	6
Celestial Rose	0	3	6

RHODODENDRONS (*Rhododendron*)

Are the most showy and beautiful shrubs produced in the garden; and as such, deserve assiduous care, to bring them to perfection. They should be planted under a north wall, so as to be screened from the intense heat of a spring or summer meridian sun, in which case the leaves will become brown and sickly, no supply of water being adequate to their requirement in such a situation. They should be planted in pure peat or heath-mould—a *small* portion of garden mould may be added. Great care is requisite in raising plants from seed, which must be sown very early in the Spring in pots, in a sandy soil, and but sparingly watered. When six weeks old, they may be potted out singly; during this time they require artificial heat. Cuttings of young wood will strike under hand glasses, if the air is excluded by pressing down the glass.

GRAFTING OF RHODODENDRONS.

MR. JOSEPH WALKER, of Banner Cross, near Sheffield, has succeeded in grafting the *Rhododendron Alta-clerense* on the *Ponticum*. In a communication inserted in the *Gardener's Magazine*, he states, "that having obtained a small sprig of the *Rhododendron Alta-clerense* from Mr. Paxton, at Chatsworth, he inserted the end of it into a potato, and took it home. Happening," he says, "to have a small plant of *Rhododendron ponticum* in a pot, I cut it down to about five inches above the pot, and grafted it in the whip manner with the small sprig thus procured, letting the end still remain inserted in the potato. I then clayed it, and put it under a hand-glass in a cool vinery, where it united to the stock, and is now a healthy plant, standing out under a south wall."

RHODODENDRONS WITHOUT PEAT.

It may not be uninteresting to many of our readers to know that it is *not* absolutely indispensable to the successful growth of the *Rhododendron*, that it be planted in peat soil. *Shade* seems to be of greater importance to it than peat. In many situations, having shade, a northern aspect, a moist subsoil, contiguity to water, or other similar advantage, this plant may be seen growing luxuriantly without any portion of peat applied to its roots. On the other hand, after proper care has been taken to provide peat soil for planting in, and all due attention paid to the removal of this magnificent shrub into situations, exposed, dry, and open to the full effects of the sun, we rarely, if ever, have seen it grow with that vigour which could be considered satisfactory. One instance apparently at variance with this opinion occurs to our recollection, but here its success we found dependent on a moist red sand stone rock two feet only beneath the surface. In considering what description of earth, independently of peat, is best suited for the *Rhododendron*, we recommend a light sandy loam;

and this may be improved by the admixture of decayed leaves, or other vegetable matter. Young plants may now be purchased at a very reasonable price from any nurseryman, otherwise their propagation from seed is quite easy, and particularly desirable on account of the variation in tint and character of the plants so raised, the more especially if seeds be preserved from plants which have flowered near to other species. If care be taken to fertilize the flowers of one species with the pollen of another, hybrids may of course be expected, many of which may now be met with of the most splendid character.

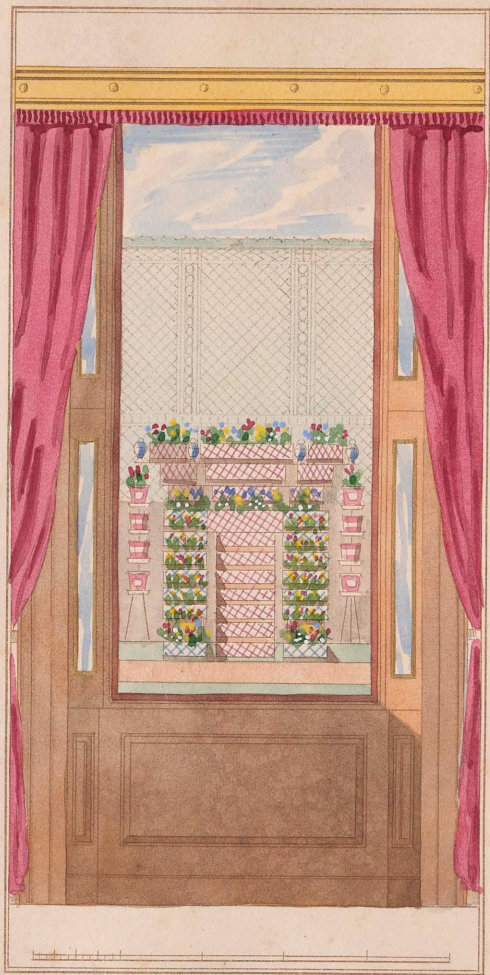
AZALEA, [THE.] *Azalea.*

This splendid and ornamental shrub has but little leaf, the flowers resemble in form the common Honeysuckle, and come at the end of the branches. There are the Red, White, and Yellow Azaleas, which grow about three feet high, all of which require a peat soil. They are propagated by layers and suckers, which should be well rooted before transplanted. The only pruning required, is the cutting out of the dead wood.

THE HYBRIDIZING OF THE AZALEA PONTICA WITH THE RHODODENDRON.

Numberless varieties between the Azalea and the Rhododendron may be easily effected, merely by the removal of the anthers from the flowers of one plant, soon after it has opened, and bringing to the style of that flower the pollen of another species. From the seed produced from a flower thus artificially impregnated, will spring hybrid plants, partaking of the character of each of the two species employed.

Choice will of course be made of those Azaleas or Rhododendrons which are known to perfect their seed; *the two flowers experimented on should be such as have opened on the same day.* The destruction of the one set of anthers must be effected as early as possible; and those to be made use of should be taken where they are beginning to burst and discharge their pollen or farina. A little observation in the economy of nature in the fructification of vegetables, will enable any one to act with a great degree of certainty as to the result.



View of Garden as seen from Back dining room window.

AMENDED DISPOSITION OF BOXES AND VASES. *See page 101 for the green.*

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ON THE GROWING OF THE

RHODANTHE.

From Mr. DAVIS,* gardener to Lord Boston, at Hedsor.

Soil—an equal proportion of PEAT, LEAF-MOULD, and WHITE SAND.

1. Drainage—broken crocks, with a little moss over them.

2. Sow in August, and cover the seeds a *quarter of an inch*.

When the plants are three inches high, plant them into pots of three inches diameter, and shade them a few days, until they have made new roots. Then they may be exposed under glass.

3. Heat—from 65 to 70 degrees, until the plants are established in the pots.

When the pots are full of roots, remove them into others of five inches diameter, and again into some of seven inches, at any season as they require.

4. Heat in the winter—45 to 50 degrees. They must be kept in an airy part of the Green-house, near to the glass.

Water only when dry.

* N.B. Mr. Davis's method produced in 1839 fine plants 28 inches high in full flower in the month of March.

Mr. MACKAY recommends,

1. Decayed leaf soil and light maiden earth, equal parts of each.

2. The seed should not be covered with more earth than will exclude it from light.

3. The temperature should not be lower than 60, or higher than 80.

4. The winter temperature should not exceed 65, nor fall below 40.

AN AMENDED DISPOSITION

Of the 24 boxes (and 8 vases only,) in a garden 16 feet by 10 feet, is here given to shew one among the many varieties it is capable of exhibiting. This print is engraved on zinc, and coloured in water colours. The other variety of the same view, on a smaller scale, is *printed from wooden blocks, in "many colours" in oil*, and is called "Polychromatic Printing." A new process, for which a patent has been granted.

ON THE CULTURE AND PRESERVATION OF THE FUCHSIA DURING WINTER.

Few plants being more ornamental or of greater variety than the Fuchsia, Mr. Dyson, in the Floricultural Magazine, remarks, that by the following easy and simple method, he is enabled to maintain a numerous variety of these graceful and showy plants. "During the winter," Mr. D. writes, "I have an open shade facing the south, the front of which I fill up during the winter with the lights of my cucumber frames; in this shade I store my Fuchsias, which have grown for several years in the flower garden, some of which are from ten to twelve feet high in the stem. About the middle of October, plant their roots carefully in light rich soil on the floor of this shade; here they remain fully exposed in the front till the frosty nights set in; the glass frames are then placed in the openings, but taking care to allow sufficient air when the weather is mild. During a long continuance of damp weather, should the stems show appearance of mould or decay, by throwing on the stems and branches some newly slacked lime when in a powdered state, it will readily adhere and harden the bark in a few days, (selecting a clear sunshine.) The loose lime may be washed off by the application of the garden engine; should it become hard it may remain. Frequent washing must be avoided. About the end of April, prune all the decayed wood, then plant out for the summer into the borders and on the lawn. About the end of June they grow very freely, and shortly afterwards produce flowers, which increase, displaying the greatest profusion during the whole of the autumn."

CAMELLIA.

This splendid genus of flowering plants contains six species and about two hundred varieties. Though strictly speaking it is a green-house plant, it will frequently succeed in the open air if care be taken. It must be planted under a southern wall, and well matted during the winter. A rich soil is requisite; and much care required in watering, to prevent them from shedding their flowers before the buds expand. During the period of their growth the leaves should be carefully washed from dust, by sprinkling them with the hand or by gently spunging them.

The following we have extracted from the Floricultural Magazine.

"CAMELLIA JAPONICA, 'THE KING.'

"This is one of the handsomest of many varieties that within these few years have been added to our collections. It would appear from the following communication, kindly sent us by our friend, Mr. Garvie, Nurseryman, Stratford Green, near London,

that we are indebted to him for the introduction of this very excellent variety. He says 'the Camellia in question was imported into this country early in the spring of 1836, and the first plants were let out by me in October of the same year.' About this time plants were sold as high as twenty-five guineas each. Deeming it the finest variety then out, I named it the King, and by this appellation it is now known. According to size, plants are now sold at the various intermediate prices, from 15s. to 42s. each.

"I received a letter from one of the first Nurserymen in Ghent, a few weeks ago, informing me that it was in fine flower at Mr. Rynder's, an amateur at Brussels, and gave great satisfaction, being finer than the drawing, which was made from a very imperfect flower. This variety is a very free grower, and has the desirable property of blooming at an early stage of its growth. The Camellia is one of those classes of plants, the interest of which will, in all probability, continue to increase, unlike the flowers of a day, that bloom gaily, pass away, and are forgotten. The Camellia japonica is becoming more and more appreciated every year, and among the various cultivators of this family, are several new and undescribed kinds, highly spoken of here: of these nothing can at present be said. The following are, however, a few of the new and leading kinds: the Queen Rose, by Mr. Presley, near Bromley, Kent, has been purchased by Mensuar, at Verschafelt, Nurseryman, Ghent, for one hundred guineas; but is not yet, as far as I am aware, in the London trade. Palmer's Perfection, 42s. Palmuri; this is very scarce, I believe it is not yet for sale.

Palmer's Cavendishi	...	31	6	Campli	...	...	10	6	
Colvilli rubra	...	...	10	6	Lady Elisnore	...	...	10	6
Candidissima	...	...	5	0	Youngi	...	...	7	6
Donklari	...	...	10	6	Frankfortensis,	10s 6d. to	21	0	
and fine strong flowering					Jensseni	...	...	10	6
plants, with nine buds...	63	0			Kellyana	...	...	10	6
Gellisi	...	...	5	0	Hetropetaia rubra	...	...	7	6
Lefeveriana	...	...	10	6	and var. alba	...	...	7	6
Noblessima	...	...	10	6	William the Fourth,	Cun-			
Tricolor	...	...	10	6	ningham	...	...	21	0
Oceroluca	...	...	21	0	Nicholsi	...	...	21	0
Hendersonia	...	...	7	6	Eliza	...	...	31	6
Sieboldi	...	...	10	6	Humi superba	...	...	42	0

The whole of the above are good, many of them scarce and excellent varieties, all of which I possess in strong and vigorous plants."

ON THE CULTURE AND PROPAGATION OF THE.

LOASA AURANTIACA.

The exceeding beauty and rapid growth of the Loasa Aurantiaca render it not altogether unworthy the attention of the botanist. Mr. Ferguson, (in the Floricultural Magazine), remarks, "that he has a piece of wall 18 feet in length by 12 in height covered with this plant: the foliage is good, and the thousands of flowers standing out

from the wall eight or ten inches, present a splendid and interesting appearance." The *Loasa Aurantiaca*, the general habit of which appears to be peculiarly fitted to mingle in the society and to receive the help of other plants less dependent on itself, may be mixed with *Maurandias*, *Lophospermums*, *Eccremocarpus*, &c. their agreeing in habit and colour: also the various species of *Clematis*, the habits of which still more closely assimilate than the preceeding, and in this way will produce the most pleasing effect. It may be grown on trellises, walls, the stems of standard *Roses*, *Cytisuses*, *Robinias*, &c. &c. where it would be difficult to cultivate any other kind of creeper with equal success. It is one of those plants which when better known will be a decided favourite, especially with those who have but little room for preserving plants during the Winter.

The annexed "*ground plan*" of a tiny garden, is given on a scale to shew that diminutive as it is, only a small portion of it (16 feet by 10,) is visible from the window of the back dining-room; and yet in this compressed space, there are at the moment of writing these observations, (April 13, 1839.) twenty-four boxes and eight vases filled with flowers, viz.—Heartsease and Anemones, Primroses and Polyanthus, Daffodills and crimson double Daisies. The effect of these flowers in porcelain fronted boxes, on a mere strip of the sloping bank of the "Grand Junction Reservoir," (or any other unsightly object,) is very pleasing.

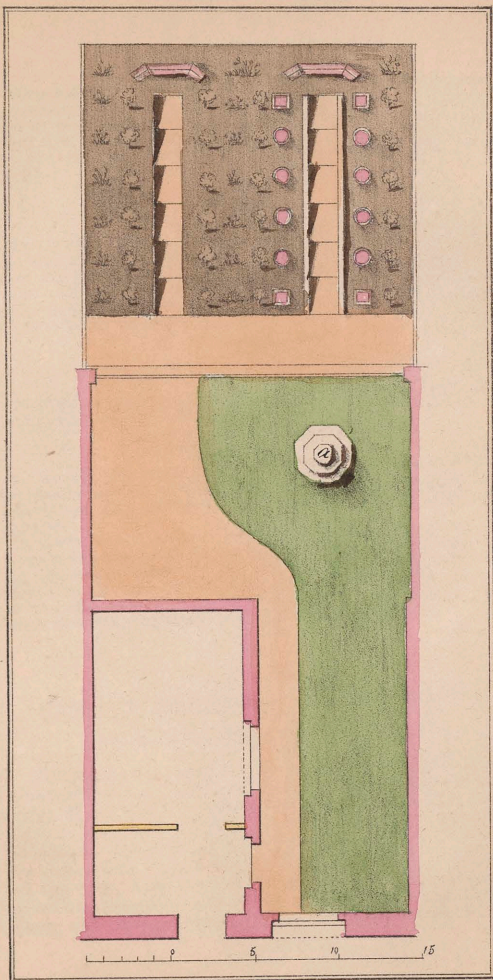
THE GUELDER ROSE.

This pretty shrub, often called the May Rose, is propagated by layers or suckers, and produces white flowers, like balls of snow, sometimes grows to the height of from ten to twelve feet. It will grow in any soil, and mix well with Lilac and Laburnum, forming a beautiful group of Yellow, White, and Purple. It requires much pruning (which it will bear to any extent) to keep it in good shape.

HYDRANGEAS.

Require a soil of maiden loam, taken from the field or common, with manure well rotted, and abundance of water. Cuttings of young shoots will strike readily under a hand glass during the month of May. Pots containing them, if well exposed to the sun during the autumnal months, may be kept through the winter in cellars, with little or no water; but they must be repotted early in the spring, removing as much of the old earth as possible, without injuring the roots. All but four or six of the shoots should be cleared away, which will cause the flowers to be larger, and of a finer colour.

They bear well in the open air, although often kept in pots because highly ornamental.



GROUND PLAN OF GARDEN.

KALMIA.

There are nine or ten varieties of this very handsome but deadly *poisonous* shrub. They may be propagated by seeds, layers, or suckers from the roots, in a light sandy mould, and require a slight heat; in the summer they should be fully exposed to the air, and protected from severe frost and excessive wet during winter.

CLEMATIS.

This hardy climbing plant is a great favorite, owing to its beauty and fragrance, bearing a white blossom nearly all the summer. They are easily propagated by layers, from seed, or by parting the roots. Like all others there are many varieties; *Clematis Viticella purpurea* is a very pretty one, bearing a purple flower, succeeded by red berries, but wants its fragrance.

SYRINGA, OR MOCK ORANGE.

The common *Syringa* is much esteemed on account of the scent of its white flowers, which Mason calls—

“The sweet *Syringa*, yielding but in scent
To the rich orange.”

The leaves have much the smell of fresh cucumbers; and are sometimes used to flavour spring salads. The foliage is of an apple-green tint, and mixes very agreeably with evergreens of dark hue.

It is very hardy, and will bear our severest winters; but after it has began to shoot in spring, its tender leaves and blossom buds are sometimes injured by the cold, and should not therefore be planted in any very exposed situation. It will grow in any place, in any soil, and thrive under the drip of trees. It may be propagated by cuttings, planted in October, or by suckers.

ON THE
UTILITY OF AMERICAN BOG PLANTS,*Both in Gardens and Pleasure Grounds.*

This highly ornamental class of flowering shrubs ranks, amongst the most hardy, the most showy, and the most serviceable of any we possess. Their floration is profuse, varied, and gorgeous in the extreme; they are evergreens in winter, and splendidly attractive in summer; they may be transplanted without sustaining any injury, at all times of the year, even when in full flower; take them up with a good ball attached to their round adhesive and reticulated roots, and you may remove them with impunity as often as

you please—no matter what their age or size may be—they will flower the same year as if they had not been touched. This renders them very valuable, as they increase in growth. (Witness at Knap-hill, Mr. Waterer's magnificent standard "Rhododendrons," from eight to ten feet high!! at fifteen and eighteen guineas the plant.) These splendid specimens have been in training for many years, some ten, twelve, and fourteen; considering the time it has taken to bring them to their perfection, and that Mr. Waterer is perhaps the only person living who has such plants to sell, the price is not unreasonable.

Two of the most tastily disposed and ornamental gardens in England, are Lord Farnborough's, at Bromley, and Lord Carnarvon's, at Highclere; the principal feature of attraction in both these beautiful places is attained by a profusion of clumps, of American bog plants, besides gravel walks with long marginal belts on either side, profusely studded with Rhododendrons, Kalmias, Azaleas, Vacciniums, Andromedas, &c. &c.; and wherever a stream or lake is at hand, islands are judiciously introduced, and being thickly planted with these American shrubs, present in the summer one gorgeous mass of reflected floriation, the splendour of the tints greatly enriched by the tremulous and varied shadows occasioned by the glistening of the waters, and the brilliancy of the carpeted surface above, reminding one of some of Claude Loraine's glowing sunsets.

At Lord Amherst's, at Montreal, near Sevenoaks, an oblong island has been made in the midst of an oval pond. It presents a perfectly matted surface of Rhododendrons, and every summer bursts out into one condensed mass of resplendent flowers, exhibiting in lieu of a common pond one of the most attractive objects in these beautiful grounds; and on a small scale, a good sample of "*capability*."

In the years 1835-6, the writer of these observations inserted several articles from time to time in the *Morning Herald*, "On the expediency of improving the parks and other places of public resort." In one of these papers, the following enumeration of the advantages of using American flowering shrubs profusely in gardens and ornamental plantations, are inserted *seriatim*.

1st. "Their hardness and cheapness are strong recommendations. Mrs. HAMMOND, of Bagshot, offers any number of strong plants of 'Rhododendron Ponticum,' at 33s. per hundred, somewhere about £16:10. per thousand, and this price includes the carriage (to London.) They

are of rapid growth, and have the habit of growing and expanding *outwards* more than upwards, thus increasing in bulk instead of altitude, and seldom attaining a height exceeding four, five, or six feet. They become most admirably suited for a fore-ground to all ornamental clumps of trees and young plantations.

2ndly. "The ease and facility with which all this class of plants may be transplanted and removed at any time, at any size, and at any age. Far from being injured by this process, it is rather beneficial to them than otherwise, the cauliflower-shaped and matted root never branching out to create difficulty in taking up the plants or to disturb others near them. They never require to be cut down to thin the plantations, or pruned to waste as is the case at present with the recent plantations in St. James's Park. These plants therefore, like the *Camellia Japonica*, increase in value as they grow in size.

3dly. "The consequent advantage of this two-fold increase of growth and value soon becomes manifest in the improved quality of the *stock* available now or hereafter, whenever required for making additional improvements and clumps of flowering shrubs in other parts of the grounds; all apprehension of danger by transplanting being needless.

4thly. "The very seasonable time when this beautiful class of plants come into flower, blossoming from the middle of May and continuing their floration till the end of June, the very time when London is filled, and all the world at hand to enjoy the gay display, after which the 'Rhododendrons' being evergreens, will be ornamental till the returning spring calls them into beauty again.

On the islands in St. James's Park, these plants will, both in winter and summer, afford the very best protection for the water-fowl, whilst, when in flower, the reflection on the water of such immense masses of blossoms, will be of unrivalled beauty and magnificence."

5thly. The sporting character of these plants in their *seedlings*, beautiful and valuable varieties occurring from their habit of hybridizing.

One precaution only is necessary in establishing this class of plants, that is, previous to planting, to put about half a wheel-barrow full of their own bog earth round the roots: clay is destruction to all the family.

For the convenience of Londoners, the best bog earth may be obtained at Wimbledon-common; if that is not to be procured, a mixture of decayed leaves and sand is a good substitute.

HERBACEOUS PERENNIAL, BIENNIAL, AND ANNUAL FLOWERING PLANTS.

Common perennial flowers, whether strictly herbaceous or bulbous, afford the principal materials for floral decoration. Most herbaceous perennials are propagated by parting the roots, or by cuttings; but some succeed better by sowing.

BIENNIALS

Are that class of plants whose existence is limited to two years, in the latter of which they flower, and then decay. They are sown in beds in the end of spring, and are generally transplanted in the course of the autumn into the places where they are intended to stand, that they may be confirmed before winter, and shoot up readily into flower the following summer.

ANNUALS,

Though of fugitive duration, are possessed of much beauty of hue and elegance of form. They are of easy culture, only requiring the seed to be sown where they are intended to grow. They are divided into three classes: the *Hardy*, the *Half Hardy*, and the *Tender*. The *hardy* are sown at once in the ground which they are to occupy; the *half hardy* succeed best when aided by a slight hot-bed, and then transplanted into the open air; the *tender* are kept in pots, and treated as green-house or stove plants, to which department they properly belong.

It is now the practice of some florists to grow and treat as annuals, or rather as biennials, great quantities of the more hardy Pelargonias, Verbenas, Salvias, Fuchsias, Petunias, and other genera. Mr. James Smith, at Hopetoun House, every season propagates, by cuttings or seeds, several hundreds of these plants. Grown in moderate-sized pots, they are kept in frames or cold vineries during winter. About the end of May, or as soon as there is no longer any apprehension of injury from frost, the plants are taken out of the pots and plunged into the open ground, in any warm sunny spot or clump in the flower garden. If the stems are long or naked, they are pegged to the earth. Towards the middle of July they begin to grow vigorously, and in August or September present, in luxuriance, at least, if not in magnitude, a better representation of their native vegetation than we see elsewhere in our gardens. Upon the approach of frost, they are, with the exception of the Fuchsias, left to their fate, as it is easier to propagate new ones than to preserve the old. These plants, with the fine new annuals, and the gorgeous Dahlias, give a splendour to the autumnal flower-garden which in former times it did not possess.

BULBS.

The soil most adapted to bulbous roots *generally*, is that of a light sandy loam, where there is no stagnation of moisture below.

Bulbs of most sorts flourish in rooms with less care, than most other kinds of plants.

Hardy Bulbs will endure all weathers without any artificial heat or protection, though some of this class may be made to blossom much finer by occasional shelter from cold, and more particularly from wet.

BULBS IN GLASSES.

The Bulbs usually flowered in water alone, are the Hyacinth, Narcissus, early Tulips, Persian Iris, Guernsey Lily, and Crocuses. Those who delight in relieving their winter apartments, from the destitution which their flower stands must sometimes exhibit, need not confine themselves to this list. They may take up almost any bulbs from the borders, and place them on glasses. The absence of glasses, made expressly for the purpose, need not be an obstacle; sheet lead may be fitted in the tops of china, or other stands, and have holes cut in it of proper size to receive the bulbs. Various other methods also may readily be devised. The "Green-house Companion" has explicit directions on this subject, which are practical and good. The Author says: "The season for placing Bulbs on water, may be at any period after they have been matured; but the most usual with spring bulbs is from October to February; and with autumnal bulbs, August and September. Planting in earth for a few weeks such bulbs as are to be blown on water, is the best mode of causing them to protrude roots freely, which, when they are placed on water at once, is not always the case. Whenever the roots are a quarter of an inch in length, take them out of the earth, wash them gently, so as not to injure the radicle, and then place them on the water. It is not essential that bulbs on water should be placed in much heat, for the principal stimulus to a newly planted bulb is the moisture; and if the room in which the glasses are placed be kept to 45° or 48°, that will promote their vegetation for some time, as much as if 10° or 15° higher. When the flower stem has risen an inch or two, then the heat may be considerably increased; that is, the glasses may be removed from a room without a fire to one where a fire is kept, and where the temperature will generally be found between 55° and 65°. Here they will advance with considerable rapidity, especially if placed on a stand or stage near a window of south or south-east aspect. They will blow, however, without any sun, but the colours of the flowers will be inferior. Those who keep bulbs on water are often at a loss when to change it. There is no fixed time for this purpose: the principle is, to keep the water sweet and pure. In a temperature of 45° or 48°, when the bulbs are newly planted, this will be effected by changing once a week. At 60°, and the glass nearly filled with roots, the water will get putrid, and show a muddiness in two or three days, or less, and whenever it does so it ought to be changed. The operation of changing is easily done by one person when the roots are only an inch or two long; but after the flower stems are of some length, and the roots nearly at the bottom of the glass, two persons become requisite—one to take out the bulb and hold it, and

to dip its roots once or twice in a vessel of clear water to cleanse them a little, and another to empty and rinse out the glass, and refill it with water. It is essential that the water used for renewal or for rinsing the roots, should be of the same temperature as that which it is to re-place, and this can be easily done by pouring a little hot water into the cold water. Whether the water be hard or soft is unimportant. Some persons add the size of a small pea of nitre to each fresh glass of water: we have thought it beneficial.

LIST OF BULBS FOR FLOWERING IN THE SPRING.

<i>Scilla siberica</i>	<i>Crocus spectabilis</i>
„ <i>carnea</i>	<i>Muscaria plena</i>
„ <i>bifolia</i>	<i>Leucojum verra plena</i>
„ „ <i>alba</i>	Double yellow tulip
<i>Gilanthus nivalis plena</i>	„ red ditto
<i>Narcissus minor</i>	<i>Oculus solis ditto</i>
<i>Erythronium dens canis</i>	Early single ditto
„ <i>album</i>	<i>Narcissus jonquilla</i>
<i>Crocus luteus</i>	„ <i>angustifolia</i>
„ <i>langenefflorus</i>	<i>Scilla non scripta alba</i>
„ <i>sabini</i>	„ „ <i>carnea</i>
„ <i>obvatus</i>	<i>Anemone apennine</i>
„ <i>albidus</i>	„ <i>nemorosa plena</i>
„ <i>elegans</i>	„ double scarlet
„ <i>leucorhyncus</i>	„ „ <i>crimson</i>

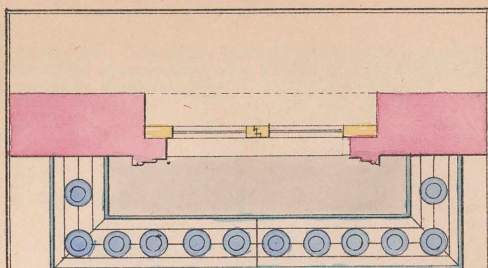
THE BLOOMING OF THE HYACINTH IN WATER.

Hyacinths may either be planted in pots, beds, or be placed in bulb glasses; which latter is the favorite one, especially with ladies. The bulbs should be placed in the glasses during the months of October or November; when the incipient fibres or roots make their appearance, and the scapus or flower stalk be just discerned making its way to the top, the water should cover the whole of that part whence the fibres proceed. It must be soft or rain water, and requires changing as often as it becomes offensive, which generally occurs about ten days after the putting in, and afterwards varies from a fortnight to three weeks.

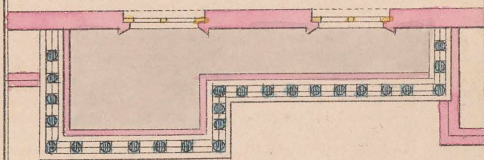
They should be placed in a situation where the light is not very strong, and unless for forcing where there is no artificial heat. The mantel-piece of a room where there is a fire must be avoided; for nothing tends so much to cause a deterioration in the bells, and to produce a tall unmanageable stem.

DESCRIPTION OF THE BALCONIES.

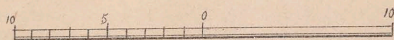
The plan of these balconies is given to shew the advantage in a very small house with very small windows, of having a *projecting iron frame-work* for the flower pots to rest on; by this method an increased number of pots can be placed in each window, a more free circulation of air is obtained, and the plants can be more easily pruned



BED ROOM.



DRAWING ROOM.



PLAN OF BALCONIES.

and watered. The gold ornament of the railing is adopted in imitation of some examples of this mode of decoration in use at St. Petersburg.

MIGNIONETTE. *Receda Odorata.*

Dr. Evans has elegantly described the sweetness of this flower:—

“No gorgeous flowers the meek *Receda* grace,
Yet sip with eager trunk yon busy race
Her simple cup, nor heed the dazzling gem
That beams in *Fritillaria*’s diadem.”

It is perhaps the sweetest annual in the garden: it is a perennial in Egypt, where it is indigenous. It is hardy, and when in a house will live all the year; in this case, one plant only should be placed in a pot, housing it before frost.

It should be sown at the end of July, in the open ground; pot in September, and leave exposed till the frost is expected; if then taken into the house it will flower during the winter. Sow a month later, and protect through winter, for early spring flowering. If potted singly and trained to single stems, nipping off the early flowers as they appear, handsome frutescent plants will be produced. This has been practised, and the plants sold as a new variety called *Tree Mignonette*. In the *Gardener’s Magazine* a correspondent writes that he has a plant of common *Mignonette*, in a conservatory, ten feet high.

THE CHINESE PRIMROSE. *Primula Sinensis.*

(*As a window plant.*)

“Beneath the sylvan canopy, the ground
Glitters with flowery dyes; the PRIMROSE first,
In mossy dell, return of Spring to greet.”

The facility with which this plant may be grown, when the beauty of its flower is considered, renders it surprising that it is so seldom seen. Mr. Paxton directs that cuttings of old plants be taken off a little above the surface of the soil, cutting off all the bottom leaves, but not disturbing the upper ones. Fill the pot with rich compost, composed of equal parts of loam, peat, and well rotted dung; place one cutting in each pot, a little white sand round it, and sprinkle it *slightly* with water. Place the pots in a close frame, plunged in a little bottom heat, but admitting *no* air until the plants begin to grow: as soon as they show flower they may be placed in a green-house, or in the window of a sitting-room, where they will continue to blow during the greater part of the winter. *It is indispensable to the health of the plant that the pot be well drained with broken pots-hers prior to filling.*

A correspondent writes in one of the periodicals,—“My greenhouse consists of a large parlour window, with a broad sill on which I arrange my flowers; and here I grow *Geraniums*, some *Aloes*,

and a Crocus ball in spring ; but my favorite plant is the Primrose. It is in high perfection in autumn, and even on to mid-winter. I have also had them with flowers of different shades, but never fringed, I hardly know that I have any established system of treating this plant, but it does very well. I change it into a larger pot when the roots thicken round the sides of the ball of earth. No unhealthy damp is caused by this plant, but on the contrary rather conducive to health than otherwise."

HEARTSEASE or PANSEYS.

Within the last few years this simple, but strikingly beautiful flower, has come into high estimation as a florist's flower. The tints of this flower are scarcely less varied than the names bestowed on them. LEIGH HUNT introduces it as,

"The garden's gem,
Heartsease, like a gallant bold,
In his cloth of purple and gold."

There are now several hundred named varieties ; the old and common kinds are perennial, but many of the new and expensive sorts are strictly annual ; they require great care in their cultivation, to prevent their degenerating or sporting their colours. Like other plants which shoot out runners, they very quickly deteriorate the soil in which they grow, and require to be frequently transplanted, not taking up *balls of earth with the roots*, but washing all the earth away, cleansing the roots carefully of the excrementitious slime which adheres to them. It requires a shaded situation ; not one, however, on which the sun never shines, but enjoying only the morning or evening rays, while it is protected from its mid-day splendour. It is propagated by seeds, by layers, or by dividing the roots. The seeds are contained in a capsule or pod, which must be *very* carefully watched, or they will be scattered. When the plant is to be propagated by seed, it must be sown between April and September soon after it is ripe, in a rich light loamy soil, in a shaded situation, but not under trees ; it should be sown as thinly and evenly as possible, in pans or boxes placed in a gentle heat, till the seeds germinate.

Beds may be planted in March and April for summer blowing with cuttings which were struck the preceding autumn. Wash the roots, and insert them two or three inches deep into the soil, watering them well afterwards. Other beds may be planted out in September, October, and November, which plants will flower in the spring. *The best situation for a bed of Heartsease* is a spot which has the morning sun till about ten o'clock, or the afternoon sun after three. When Heartseases are kept in pots, as may readily be done, if a rich loamy compost is used, the plants may be trained by a single stem to a small trellis, when it will attain a foot or more in height. The tops may be pinched off when they rise too high, which will make them branch out. They must be kept *constantly watered, never letting them become dry*, nor must they be *exposed to too much sun*.

THE FOLLOWING LIST OF HEARTSEASE

We have extracted from Marnock's Magazine.

Venosa	Duke of Marlborough
Cream Superba	Shakspeare
Mrs. Adams	Milton
Climax	Mountjoy's Victoria
Formosa	Thompson's Vesta
Solomon	Beauty of Somerset
Mrs. Praed	Incomparable Superba
Lord Glammis's Enterprise	Thompson's Naxara
Enchantress	T. Vivid
Thompson's Victoria	Regina
King	Fanny
Gem	Senecia
Hecuba	Emperor
Jim Crow	Duke of Wellington
King's Cupid	Mogul
Corrine	Coronation
Morton's Julia	Fair Helen
Esther	Chimpanzee
Mulberry	Duke of Northumberland
Gold Sovereign	Iver Hera
Unique	Ne plus Ultra
Minerva Superba	

THE DAISY,

"The little daisy, that at evening closes,"

Is indigenous; it is a pretty simple flower, and looks well in small clumps in the front of the border: it is sometimes used for an edging, and should be *parted every year to prevent its degenerating*, which it *will do speedily*. There are more than half a dozen varieties of this modest and pleasing flower. Seed may be saved from the double varieties, and sown in the spring like other hardy perennials; but the common method of propagation is by dividing the plants in autumn, or in spring, or both, which is indispensable; for like all spreading plants they greatly deteriorate the soil, and ought *not* to stand *more than one year in the same spot*. Daisies have been very properly recommended for rock-work and baskets, training Petunia, &c. over the handles.

FORGET-ME-NOT.

*"They flourish in my favourite bower**To blossom round my cot;**I cultivate the little flower**They call, Forget-Me-Not."*

The genuine plant of this name is the *Myosotis Palustris*. It is indigenous, and very commonly found wild in moist places; and is extensively cultivated in pots in France, for the Paris market. It may either be raised from cuttings or seeds in autumn or spring, and requires little other care than being kept abundantly watered, and stopping back the stems when they grow too tall; flowers from May till August. They require to be kept free from aphides, which often infest and weaken the young shoots.

ON CONTRACTING

For the Filling of the Green-House, Balconies, and Garden, the latter by means of Boxes.

There are many advantages to be gained by adopting this method of obtaining a supply of plants.

All plants, after flowering in London, will inevitably die, unless taken the very greatest care of by a practised gardener; they, therefore, if *purchased*, become very expensive; as, without removal to a pure air, independent of the most unremitting and careful attendance, they will never blossom a second year. By a *contract*, therefore, the amateur is relieved of all this trouble and uncertainty, and he will always have before him a healthy and vigorous floration.

A contract may be made by the year, by the quarter, by the month, or by the week, or for the summer months only. Independent of the Drawing-room and Dining-room balconies, it is very desirable to have flowers outside in the bed-room balconies, as besides their graceful appearance from without, the sight of them on getting up in the morning is the most cheering object we can behold.

In a garden (however small), or in any part of a square enclosure immediately fronting ones house, a very fair display of flowers in succession may be obtained by means of a contract—without it very little will be done. Witness the poverty of the interior of the squares in London.

CONTRACT

With Mr. HORGOD, Nurseryman, of Bayswater, for the *annual supply* of flowers for No. 66, Cambridge-terrace, Victoria-gate.

1st. The Green House never to have less than 70 plants, capable of containing 110	£ 20	0	0
2nd. All the balconies to the front windows,* (eight in number,) from March till November	20	0	0

* Containing four bed-room windows, 14 pots (32s) in each	56
Drawing-room balcony, 26 (16s)	26
Four dining-room boxes, 4 tins in each	16
Three oblong porcelain square vases, 5 pots (32s)	5

Total	103
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Cheap Plants for Balconies, Boxes, &c. may be had of the following Nurseryman.

Mr. Harrison, (late Vogler), of East Acton, sells Geraniums 6s. per dozen—Lophospermum, Rhodochiton, and other choice creepers, 6d. each.

Mr. Dease, Westbourn-road, Paddington, is deservedly noted for his *Brompton ten weeks' Stocks*, which are some of the best grown in London, price 6s. per doz.—Mignonette, 6s per doz — Heartsease, (excellent varieties), 2d. each root, or 2s. per dozen.

Mr. Calder, Harrow-road, has very good plants of Geraniums at 9s. per dozen.

Mr. White, Paddington green, sells very well grown plants of Geraniums at 9s. per dozen.—Brompton Stocks, 9s. per dozen.

Mr. Drake, of Paddington Market, has *better and cheaper* early Spring flowers than are to be obtained at Covent Garden.

Mr. McArthur, Edgware-road, sells very splendid plants of the scarlet Geraniums at 10s. each; these for their size, are the most reasonable of any near London.

All these Nurserymen are in the habit of furnishing balconies, green-houses, &c. &c. by CONTRACT.

To those who maintain a gay display in their windows, and constantly require plants "*in quantities*," these reasonable charges may be of importance.

3rd. The boxes (twenty-four in number,) in the back garden, 18 feet by 12, and the vases (twelve in number,) likewise in the garden, all to be kept filled with a constant supply for eight months, at 8s. per foot running measurement, total length, 70 feet	24 10 0
4th. Front garden, merely to the extent of the breadth of the house, 18 feet, the beds to be kept filled with flowers.....	5 0 0
* Total.....£	69 10 0

Enumeration of plants in detail as they come into flower to supply the above contract.

March	Crocuses, Snow-drop and Violet.
April.....	Narcissus, Hyacinth, Pansies.
May	Stock, Mignonette, and all the varieties of green-house plants in season at that time.
June	Hydrangeas and green-house plants and Roses.
July & August	Hydrangeas, Fuchsias, Verbenas, Lobelias, Calceolarias, &c. &c.
September ..	Salvias, Lobelias, Hydrangeas, Fuchsias, green-house plants, &c.
October	Geraniums, Lobelias, &c.
November....	Chrysanthemums, Evergreens, &c.
December ...	Ditto, ditto.
January	Ditto, ditto.
February	Ditto, ditto.

Detail of contract for filling *boxes only* in back garden.

1st time—Crocuses.....	at 1s. per foot.
2nd „ Heartsease.....	„ 6d. „
3rd „ Ditto	„ 6d. „
4th „ Stocks	„ 1s. „
5th „ Geraniums	„ 1s. „
6th „ Ditto	„ 1s. „
7th „ Ditto	„ 1s. „
8th, 9th, or more—Ditto	„ 1s. „

7s. per foot
for 9 months.

* The average annual wages of one gardener (including his board) amounts to about £70.

THE AFRICAN MARIGOLD

Is propagated by sowing under shelter, or in a warm border, in April. They may be transplanted, when two inches high, into the place where they are to bloom: they grow two feet high, and should be supported to prevent their straggling. It is a most beautiful *showy autumn* flower, suiting *any* soil.

NASTURTIUM.

There are three or four varieties of this plant, all producing gay orange-coloured flowers. The single-flowered are annuals, and should be sown in April, and will flower all the summer. The common climbs to the height of ten or twelve feet. The double-flowered is a perennial, propagated by cuttings, and requiring to be kept in the house during winter, having as much sun as possible. The small flowered has a purple spot in the middle of the flower, and requires to be sown in a hot-bed, in spring, to produce early flowers.

WALL-FLOWERS.

"They shed a halo of repose
Around the wrecks of time;
To beauty give the flaunting rose—
The Wall-flower is sublime."

A very sweet smelling and early flowering biennial, both single and double flowered. The former grows well on old walls, or any brick or lime rubbish. The double is not so hardy, requiring protection during severe frosts; it grows well in pots, and is propagated by cuttings. The seeds of the single wall-flower will grow readily. The double is often perennial.

STOCKS.

There are two biennial kinds, the Brompton and Queen's, which require to be sown in the spring, and will stand our winter, flowering the succeeding summer; and there are three annuals, the Ten Week, bearing double as well as single flowers all the summer, generally forwarded in a frame, or may be sown in April in a pot, and brought into the house till fit to plant out, or in a south border: it is very fragrant, and a general favourite, of various colours, red, purple, and white. There are also the Wall-flower leaved, and the Indian, treated in the same manner.

THE PENCILLED GERANIUM

Produces a delicate white bell-flower, finely striped on the petals with red veins. It is a hardy creeping plant, flowering in May and June: it requires a loamy soil, and a shady situation, and may be propagated by parting the roots, when it ceases flowering in Autumn.

It is well adapted for rock and basket work.

POLYANTHUS.

This is a beautiful flower, either for the border, or to be kept in a pot. The varieties are very numerous, varying in price from a pound to a shilling; it is managed much in the same way as the Auricular. The soil best adapted for this and the Primrose, is a loamy and moist, but not too rich; it prefers shade, and will grow in a stiff clay.

THE DOUBLE ROCKET.

A pretty fragrant plant, nearly two feet high, blooming all the summer, either red, purple, or white, and is propagated by parting the roots in autumn.

CREEPING VERBENA.

A most beautiful scarlet flowering plant, blowing in June. It is readily propagated by cuttings, but requires a slight protection during severe frost: a fine plant for rock or basket work, or for pots.

CANDY TUFT.

Is a pretty annual, of bright green foliage, with scentless blossom. There are three varieties, purple, white, and scarlet. It is well adapted to enliven the sombre appearance of evergreens during the winter months. It makes a good edge for borders, bearing an abundance of flowers, or looks well in clumps. It braves all the inclemency of winter, but will not bear transplanting.

COLUMBINE.

"Bring hither the pincke and purple Cullambine."—Spenser.

A perennial and indigenous plant of great beauty, but by no means common: it grows two or three feet high, and is much given to sport its colours, as well as to the doubling of its graceful flowers; the same seed producing varieties of white, blue, red, and often mottled. It is best raised from seed, and where it has been once grown it will abundantly sow itself, and the scattered plants may be taken up and re-planted. They will commonly blow the second year.

The Canadian Columbine is handsomer, but smaller, and may be propagated the same way.

CONVOLVULUS MAJOR.

A beautiful climbing plant; will grow nine or ten feet high, if accommodated with a string or pole to climb up. It is an Annual raised from seed, and is well adapted to hide a wall or any unsightly object, and one of the prettiest annuals that we have. It is of various colours, blue, purple, red, variegated, white, &c. It may be sown in April, and as soon as it begins to run, afford support.

C. Minor is a very pretty blue annual, raised also from seed.

HARDY ANNUALS,

That will not transplant.

Annual Sunflower
Convolvulus, Major and Minor
Candy Turf
Dwarf Lychnis
Dwarf Poppy
Nigella
Flos Adonis
Larkspur Lobels
Catchfly

Lupines
Lavatera
Hawk Weed
Scarlet Pea
Sweet-scented Pea
Tangier Pea
Venus' Looking Glass
Venus' Navel Wort

These must be sown where they are to stand, and not too thickly, being thinned out by and according to their size and character.

GENERAL OBSERVATIONS.

RAISING ANNUALS IN THE BORDERS.

Dig the soil, and make it light and fine; mark thereon with the top of a large flower pot, a circular impression, within which sow the seeds. The pot should then be placed bottom upwards over the seeds, there to remain till they have struck root, when it may be raised about two inches from the soil on supporters for a few days, and then entirely removed. By this practice, the seeds on their first germination are protected from birds and slugs, with the advantage of warmth and moisture, by which vegetation is considerably forwarded, and with more certainty of success. The use of pots is *not* recommended to supersede that of small hand-glasses, but as affording conveniences where they are not at command.

ANNUALS RENDERED PERENNIAL.

Many annuals may be preserved through the winter, in a greenhouse, by striking cuttings in August or September; as, the Chry-

santhemum coronarium, Clarkia, Collinsia, Stocks, and many others. The advantage obtained is their *early flowering*, and the preservation of *superior varieties*.

ORNAMENTAL GARDEN ANNUALS

are, of all kinds of flowers, perhaps the most interesting, being easy of culture, and requiring little manual labour. They possess two great advantages over the culture of all other flowers: in the first place, they are attended with less expense; in the second, all the enjoyment is obtained within the space of six or eight months.

Bulbous or tuberous rooted flowers, like annuals, produce their blossom in the first year, but are attended with considerable expense. Perennial herbaceous flowers are not in perfection till the second year, and they too can only be beneficially purchased by such as anticipate retaining the occupation of their garden for years in succession. The cost for the seeds of annual flowers is a mere trifle; the expense of raising the soil, sowing and thinning them when they come up, is also very little; while the effect produced is greater than many bulbs and most perennials.

The flower of a choice hyacinth, the bulb of which will cost 5s. or 6s. before planting, is not much more beautiful than that of a double rocket cockspur, which may be reared to perfection in three months, from a seed at an expence of about one fortieth part of a penny. Annual flowers therefore are above all others suitable for the gardens of suburban residences, which are hired for not more than a year; they are equally so for decorating all other gardens, particularly those which are defective in soil, situation, or exposure to the sun.

A CONSTANT SUCCESSION OF FLOWERS.

The flowering of the *Helichrysum Macranthum*, *Rhodanthe*, and some other herbaceous annuals, will be greatly prolonged, and a constant succession of blossom maintained till each is destroyed by the frost, *by removing the flowers as soon as they evince any disposition to mature their seed*. This practice will be found especially useful with those plants which may be brought into flower in the winter months; a few specimens of this species might thus be made to contribute to the gaiety of the Green House during *the whole of that dull season*. Plants acquire frequently quite a sub-shrubby habit by having their flowers plucked at the time they begin to fade, and are thus preserved in the Green House through the winter months, flowering again the succeeding season. They may be sown at any time, according to the season at which they are desired to flower. They will require protection if sown late in the year or during the winter.

NEW HOLLAND PLANTS NATURALIZED.

The following method has been found successful in naturalizing many of those splendid plants from Australia.

In Paxton's Botany, No. XLIX, a correspondent writes: "Having for the last ten years introduced to the pleasure ground such of my New Holland plants as I judged most ornamental, it may not prove uninteresting to notice my mode of enabling them to resist the winter. I prefer the month of March to any other, making sure that vegetation will not take place before they are planted out: I then support each plant with four or five stakes, reaching to the top in an angular position. Thus surrounding them from bottom to top with hay ropes, not too close, I then cover the surface for several feet round with fine sand to prevent the frost from entering: having succeeded in this way the first winter, they fearlessly encounter every succeeding one, and vie with our common laurels. Amongst those alluded to the following are a few.

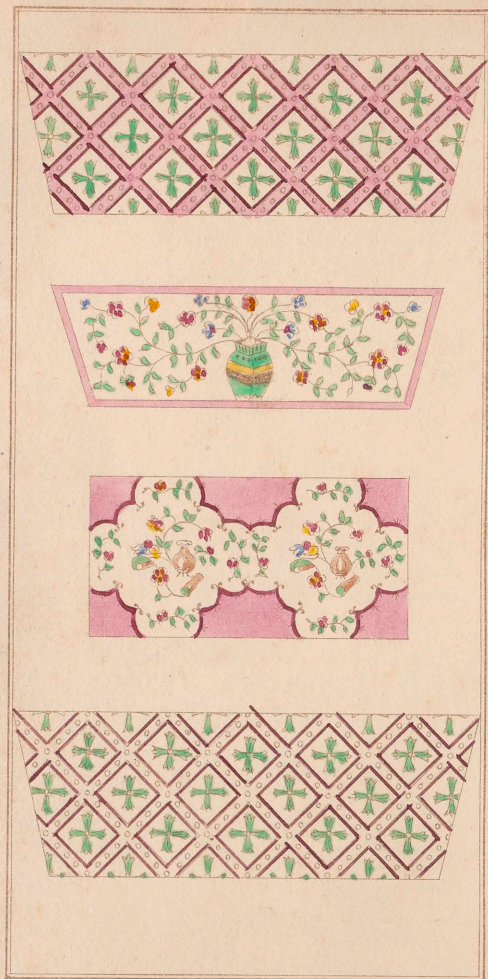
Vistea Lyccoides, 6 feet by 12 in
circumference
Hakia saligna, 8 feet
Fuschia arborea, 9 ft. in flower

Laurus indica, 12 feet by 18
Hakea Florida, 12 ft. by 20
Cratægus glabra, 18 feet
&c. &c. &c.

ON RETARDING THE BLOOMING OF
PLANTS.

Among the many improvements made in the cultivation of flowers, the methods invented for retarding their flowering, is *one*. It has been the opinion of many naturalists, that the annual developement of flowers, yields more real satisfaction than if all were ever flowering—that their disappearance for a season, enhances the value of their return. It is long since the method of procuring a late bloom of *Ranunculus*, *Anemones*, and *Roses*, has been practised. This was by late planting the tubers of the two former, and *double pruning* the flowering shoots of the latter. *Double pruning* is performed in Autumn, and in April.

If the pruning be carefully attended to, a constant succession of *Roses* may be obtained throughout the year. There are also other shrubs, such as the *Laurestinus* and *Althea frutex*, which may be so managed as to produce their flowers at *unusual* seasons. The first, instead of flowering in the very early spring, may be, by removal, made to flower in autumn; and the latter may, by the same means, have their flowering postponed till that period.



specimens of Tiles for Frontage of Boxes, averaging 8^{ins}. square.
Price from 2/6 to 8/-, running pattern

See Catalogue "A" to the Queen

ENAMELLED PORCELAIN SLABS,

For the Frontages of Flower Boxes or Flower Stands.

Much amusement and variety may be obtained by selecting from amongst the varied square,



the "Berlin patterns of worsted work," or any design which has a *running device*; some of these are very elegant and graceful; and at Messrs. Copeland & Garrett's, these porcelain tiles may be had of almost any reasonable dimensions required, or may be made of any pattern or design given; they also become usefully and pleasingly ornamental as a floor for the green-house or conservatory, in imitation of a tessellated pavement; in a "covered way" of approach to a green-house, they very greatly contribute to enrich the effect.

THE MIXED GREEN-HOUSE.

In a mixed green house it is advisable to bring the several genera into groups by themselves. The effect is both systematic and pleasing, affording to the cultivator the advantage of seeing his

stock of each genus and species, and at the same time a greater facility for any peculiar feature of management, (either with excess or diminution of water, &c.) than if scattered in different parts of the house. The

SOIL

best adapted for the majority of green house plants is composed of half light turfy sandy loam and peat earth. All garden mould, or that which has been under a state of cultivation, should be carefully rejected.

A DESIRABLE LIST OF
GREEN-HOUSE PLANTS,

From Harrison's Magazine.

Acacia cordata	Bossicea lynchphylla
" pubescens	" rufa
" armata	Bouvardia tryphylla
Alstrameria tricolor	Brachysema latifolia
" pelegrina	Burchillia capensis
" simsii	Burtonia conferta (4)
" aurea	Cactus speciosissimus
" psittacina	" Jenkinsonia
Amaryllis Johnsonia (1)	" Ackermania
" crocea vitalina (1)	Calothamnus quadrifida
" speciosa (1)	Chorizema cordata (5)
" vittata (1)	" ovata (5)
" formosissima (1)	" Henchmanii (5)
Anagallis monelli	Cistus creticus
" grandiflora	" speciosa
" Philipsii	Clianthus puniceus
Anomatheca cruenta	Clerodendron speciosissimum
Anthocercis viscosa (2)	Crassula coccinea
Azalea indica alba (3)	" falcata
" Phoenicea (3)	" versicolor
" Viscosa (3)	Crotolaria elegans
Baurea rubioides	Crower saligna
Beaufortia decussata	Cyrilla pulchella
Berberis dulcis	*Cyclamen coum
Baronea pinnata	" persicum
" serrulota	" europeum

(1) Must be kept near the glass, and have rest during winter months.

(2) Will not bear much water.

(3) Require the tops to be near glass, which will cause them to bloom well, water freely. Double pot?

(4) Near the side panes of glass in the house, so as it may have plenty of light and air.

(5) In the warmest part of the green house, and must be kept from currents of air, also as near the side panes as possible.

* There is another Cyclamen still more beautiful than the above, called *C. repandum*, but procured with great difficulty.

Cyclamen vernum
 Cytisus racemosus
 Daphne odora
 " Cneorum
 Daviesia acicularis (6)
 Deutzia scabra (7)
 Diosma umbellata
 " imbricata
 " ceratoides
 Durantia Elisii
 Erythrina crista galli
 " laurifolia
 Epacris variabilis (8)
 " impressa (8)
 " nivalis (8)
 " grandiflora (8)
 Eutaxia myrtifolia
 Fuchsia fulgens
 Gardoquia Hookerii
 " multiflora
 Galphimia glauca
 Genista canariense
 Glycine bymaculata
 Gladiolus florabundus
 " Colvillii
 " cardinalis
 " psittacinus
 Gloxinea cautescens
 " speciosa
 " alba
 Grevillea buxifolia (*curious*)
 Hibbertia volubilis
 Hovea celsi (9)
 " purpurea (9)

Hoya carnosa
 Indigofera Australis (10)
 Kennedia coccinea prostrata
 Linum flavum
 " trigynum
 Lautana sellowii
 " mutabilis
 Lechenaultia speciosa (11)
 " formosa (11)
 Loasa lateritia
 Lychnis fulgens
 " coronata
 " Bungeana (12)
 Magnolia fuscata
 Manettia Glabra
 Mahernia pinnata
 Metrosideros florabundus (13)
 Nierembergia Philicaulis
 " intermedia (14)
 Pittosporum Tobira
 Primelea decussata
 Polygala oppositifolia
 " grandiflora
 " speciosa
 Prostranthera violacea
 Puttenea stricta (15)
 Rhexia marinana
 Rhodanthe
 Ruellia fo;mosa (16)
 " ciliata
 " Sedum Sieboldii
 Selago Gilliesii
 Sollya heterophilla
 Solanum spinosum

(6) Small pot and plenty of water.

(7) Almost hardy.

(8) All the Epacridæ require plenty of water at all times; in potting them very sandy peat must be used, chopped fine and not sifted.

(9) Plenty of water. The double flower pot?

(10) Plenty of water. Ditto.

(11) I have been very successful with these flowers, they must be kept as close to the glass as possible, not watered over the foliage, and plenty of light, not too much water, potted in very sandy peat chopped.

(12) Must be grown in rich leaf-mould with old saw-dust, and potted from large 48's to 32's, to 24's, and lastly to 12's; mine was 9 feet high, with 57 blossoms on.

(13) The smaller the pot the more abundantly will it flower.

(14) Must be kept separately as it is inclined to be infested with the Aphis.

(15) Small pot, plenty of water. Double pot?

(16) Hottest part of the green house, free from draft, and use but little water during winter.

Springelia incarnata (17)	Swansonia coronillæfolia alba
Stenochilus maculatus	Tecoma Australis
Sheptocarpus Rexii	„ capensis
Sutherlandia frutescens	Templetonia glauca
Swansonia coronillæfolia rosea	Tropolum tricolorum

(17) Plenty of water, near the glass, peat with sand chopped fine.

TRANSPLANTING.

Small plants may be very neatly and safely transplanted from the borders, by making *narrow trenches round them, and filling such trenches with Plaister of Paris, mixed with water to the consistence of a thick cream.* This quickly becomes hard, and forms a pot, by which the plant may be taken up without disturbing the roots. With a little ingenuity, the soil and roots may be so encompassed, with the same material, as to greatly facilitate the safe removal of a choice plant to any reasonable distance.

It is advisable to place an empty flower-pot or basket over all newly transplanted plants for a few days, removing it only when the sun is warm, but *not* shining on the plant.

Herbaceous plants require abundance of water, especially if leafy.

TRANSPLANTING TREES.

The annular layers of wood, shown in the trunk of a tree on cutting it through horizontally, are widest in the side growing towards the south. The central circle will be found nearest the northern side of the trees' circumference. The sap vessels of trees being thus naturally adapted to aspect, they should be placed to their respective cardinal points when transplanted; that is, the side which has been growing towards the north, should again be planted towards the north. Evelyn, in 1660, asserted, from much experience, that one tree in an hundred would not miscarry were this duly observed.

WATERING PLANTS EXPOSED TO THE SUN.

It is quite proverbial, "that plants should not be watered under a full exposure to the sun." It is doubtless injurious, which the sceptic may prove. It has been frequently said, that "plants are scalded, when they have been watered in hot weather, and their foliage become brown from the injury;" it would be more philosophic to say, they are *frozen*, notwithstanding it may occur at Midsummer; for the injury thus inflicted certainly arises from the abstraction of heat consequent on the rapid evaporation of the water from the surface of the plant. Its vessels become sud-

denly constricted, as by an autumnal frost, and brown leaves bear evidence of the damage sustained. As far as is possible, *artificial watering* should be *effected* when *nature assists the operation*, either by a *cool atmosphere*, *dews*, or such *gentle showers* as oftentimes occur without effectually moistening the earth. The surface of the soil requires occasionally loosening, which will otherwise be hardened by frequent watering.

During the months of July and August, Green-House plants cannot be too sedulously attended to with regard to watering, as there are frequently more plants lost these months, than there are in the winter season, through excessive moisture. This is not so much owing to the direct influence of the sun upon the surface of the soil in the pots, as to the heat of the sun penetrating the pots, and burning or parching the roots and fibres, which generally find their way to the side of the pot. Therefore, when the pots are very much exposed to the sun, they should be protected by moss, or other material, and that in watering, not only the soil in the pots, but the pots themselves, should be thoroughly wetted. (See Paxton's Mag. Botany, No. LIV.)

Green-house plants should not be placed out, without the precaution of placing moss round the pots to preserve the roots from drought.

DRAINING FLOWER POTS.

Of all circumstances connected with the culture of flowering plants in pots, none is more important and less regarded than draining. By draining we mean putting a stratum of broken pots, broken tiles, or bricks, of a soft quality, or, which is an imperfect substitute, gravel, in the bottom of the pots, underneath the soil and roots of the plants. Potsherds should be broken down till the largest does not exceed the size of a French bean. This operation will produce much of a smaller size, even powder, which should occupy the top of the stratum. As a general rule, we recommend that every pot have one-fourth of its depth occupied by this material.

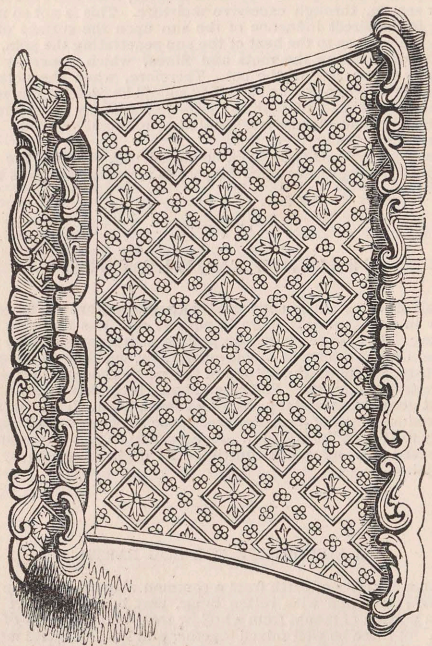
A SUBSTITUTE FOR BOG EARTH.

Take a quantity of earth from a common about a foot deep with the turf; mix this with rotten dung, part horse and part cow, with a portion of mould from a hollow tree, and a portion of drift sand; let these be well mixed together and lay for several months before it is used, turning it once a fortnight.

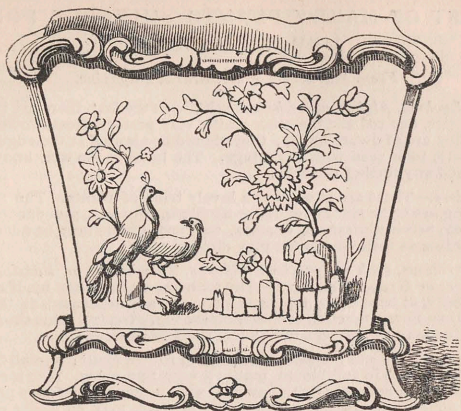
The best soil for Carnations and Pinks, is a large proportion of good rich loam, mixed well with an old melon bed, a little cow dung, and a small portion of drift sand.

ORNAMENTAL FLOWER POTS.

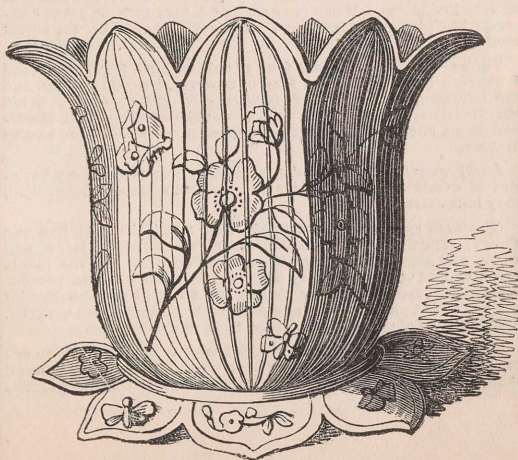
Messrs. Copeland and Garrett have favoured us with the accompanying designs for flower pots in porcelain; which for their richness and beauty, cannot fail to be held in high estimation, and



become very generally adopted in the balcony, as well as in the garden; and their classic form and novel design also render them an elegant ornament in the Drawing room.



The tulip form is particularly graceful, and when placed on a pedestal is seen to much advantage.



LIST OF HARDY PLANTS SUITABLE FOR A SMALL GARDEN.

From Marnock's Floricultural Magazine.

“Lychnis, Alpina, and Chalcedonica.—Of the first, there are two varieties, one red and the other white, very pretty delicate flowers. As they are of dwarf habits, they should be planted at the edge of borders, to be seen with advantage. The latter is too well known to need any further remarks.

Iris.—These are altogether a lovely tribe of plants. The following are to be recommended:—*Xiphium, squalens, pseudacorus, cuprea, persica lutescens, cristata*, and any others may be added, according as taste and fancy may dictate.

Narcissus, such as poeticus, biflorus, Trewianus, or Bazelman Major, or Grand Monarque.—The roots should be taken up, if not annually, at least every two or three years, and separated, as they will then flower much finer and increase more freely. This should be attended to in respect to bulbous roots in general.

Tigridia pavonia ; a beautiful bulbous rooted plant ; a small bed of these, when in full bloom, makes a very fine show. Like many others of the bulbous tribe, they increase by offsets, and also produce abundance of seed, so that a good stock may be easily obtained. They may be purchased for about 4s. per dozen.

Pinks and Carnations—are very desirable on account of their fragrance as well as beauty. As they are now so extensively cultivated, they may be had of many at the Florists' establishments at very low prices. When once obtained, they may be greatly increased by piping and layering ; but layering I consider the surest method.

Tulips.—To those who are fond of cultivating a few Tulips (and I suppose most people are fond of flowers), I would recommend the following as being good flowers :—*Drappeau*, early ; *Bruid var. Haarlem*, sweet, double yellow, double crimson, and *Marriage de ma fille*, with good border mixtures, selected from named flowers.

Lathyrus grandifolius, and Mutabilis.—Two very showy varieties of everlasting pea. If trained against a smooth level wall, they look extremely well.

Enothera speciosa, missouriensis, and taraxifolia.—All fine and showy. The flowers of the *speciosa* are very splendid, large, and white, and approaching to pink on their decline. As the plants are loose and straggling, they look rather uncomely ; to prevent which, let several stems or shoots (as many as may be thought proper) be cut out of each, and those left to be neatly tied to sticks. They may be abundantly increased by dividing the roots.

Dahlias.—The varieties of these beauties of nature are so extensive, and becoming daily more so, that to enumerate them all would take too much time and room ; and as Cottagers' gardens

in general, are too small to admit of many being cultivated, I shall leave the selection to the taste of the grower.

Pholxes.—These are also numerous; but the undermentioned few I can recommend as worthy of notice:—*Nivalis*, subulata, triflora, maculata, suaveolens, acuminata, pyramidalis, odorata, carolina, and procumbens; propagated by parting the roots.

I shall now fill up the present paper by noticing a few select annuals.

Gillia.—Besides the blue and white varieties of *G. capitata*, there are also *G. tricolor* and *achillifolia*. They are all very fine and hardy, so much so, that the self-sown young plants will stand the utmost rigour of winter.

Larkspurs.—In addition to the well known old varieties, there are a great many new German sorts, the seed of which is annually imported. Some Florists recommend the sowing of these in autumn, and to this opinion I can myself subscribe.

Flosadonis.—This is an old inhabitant of our gardens, but ought not to be despised on that account, as I know it is by some people; for it possesses a sufficient degree of beauty to recommend itself. I have found by experience that it does best when self sown.

Media elegans.—Very showy and handsome. As this, when full grown, is large and bushy, two or three plants are quite sufficient for a small garden: it will sow itself very freely.

Hawkweed.—Yellow, purple, silver, and red; but the yellow I think preferable to either of the others.

Venus looking-glass.—This is very profuse in flowering, and a few patches are desirable for the garden, particularly if the blue and white are near each other, or even blended together. There is also a large blue variety which I call Major; sows itself.

Clarkia pulchilla.—Red and white; also *C. elegans*, red and rose. I believe there are several more sorts, but with which I am unacquainted.

Candy tuft.—White, red, and purple; also a fine new scarlet and purple. Of the white variety there are several sorts; if the seeds of the different sorts be mixed and sown together, either in rows or patches, they have a fine appearance; if sown too thick (which is often the case), they should be transplanted at a proper distance, either singly or two or three together, as the flowers will then shew much finer.

Lupines.—Large blue, small blue, yellow, straw, rose and white, to which I may add, *Lupinus elegans*, *L. Cruickshankia*, and *L. nanus*, a new dwarf variety.

Ten Week Stocks.—White, purple, and scarlet (as it is called), but I think it is more properly red, at least I never saw any that were scarlet; also an extensive assortment of fine German varieties of all colours. To flower strong and fine during the summer months, they should be sown on a moderate hot-bed, as early in the season as convenient. When transplanted, let a bed be prepared on purpose, of good rich soil, in size according to the number of plants intended; to be planted at least ten inches asunder. To make a good show, let all the sorts be planted on one bed.

Nemophilla insignis.—This is a most desirable little annual, and all who are fond of flowers ought to have it. If sown on a bed by itself, or amongst others of different colours, and that come into bloom at the same time, it will make a most delightful appearance.

Calandrina, grandiflora, speciosa, and discolor.—These are all fine and beautiful. To show well, they should be sown in patches by themselves, each sort as near together as the space of ground will admit. If they are too thick, it is best to pull some up and cast them away; for in my opinion, there are many flowers spoiled in being suffered to remain where they are sown."

ON RUSTIC VASES,

WITH LIST OF PLANTS SUITABLE.

From Marnock's Magazine.

"The taste for Gardening and Horticulture, which has within a few years been remarkably on the increase, has been the means of bringing about a proportionate increase of the ornamental accompaniments of the flower garden and pleasure ground. Among the most prominent of these, may be mentioned the different kinds of ornamental and rustic vases, held in such great estimation, and which, when placed in appropriate situations, and filled with choice flowers, form very attractive and almost indispensable features of the pleasure ground in the summer months.

Some of the most rude and economical consist of a box or frame work, of the required size and form, made of stout portions of fir or other wood, roughly fastened together, and placed on a rustic stand about two feet in height; a few holes are bored at the bottom, to allow the superfluous moisture to drain off, and the outside is cased over with split rods of hazel, nailed on bark outwards, in a variety of forms. A pyramid formed of a series of these would have a grand and imposing effect.

Of a more refined order, are those designed by Mr. Clowes, of Manchester, which were published in *Paxton's Botanical Magazine*. These are formed of stout portions of wood, securely fastened together, so as to present an outline of the intended effect; this is afterwards cased over with the outside portion of the wood of larch trees, cut thin, and nailed on, leaving the bark to form the outer surface; externally, they have then the appearance of an uniform coating of rough bark, which is relieved by having lengths of old and useless cable rope, nailed on in different figures. When neatly finished in this way, and the sides hung with graceful festoons, formed by the pendulous nature of suitable plants, and enriched with the beautiful colour of their flowers, they form very agreeable and graceful objects.

It is well known that according to the principles of taste, which require harmony of effect, that the artificial decorations which are introduced in pleasure ground, on those parts contiguous to the

mansion, ought to partake in a greater or less degree of the style of architecture of the mansion itself. Viewing the present subject in this light, the introduction of the rustic vase on pleasure ground adjoining mansions of modern and elegant structure, would be as obviously in bad taste, 'as one of Salvator Rosa's rugged ravines would appear if patched in the centre of the foreground of a classical landscape of Claude;' and, it consequently would follow, that that which was intended, and when judiciously designed and adapted to circumstances, is calculated to add to the interest and elegance of surrounding objects, instead of this, its desired effect becomes a source of repine and ridicule. It is not, however, implied that they ought to be entirely banished from such places, but they should be constructed on more refined and elegant principles, so as to accord with the objects around, and this may easily be attained by using *lighter materials*, with appropriate mouldings.

The rustic vase seems to be best adapted to suit such situations as the vicinage of small villas, built in the gothic or cottage style, and to conspicuous and suitable places in flower gardens when detached from the mansion; they may be introduced with the most happy and pleasing effect in glades, judiciously intersecting a retired and sequestered walk, where, breaking at once from a dreary privacy into the opening lawn, the mind would be agreeably surprised and relieved by the graceful and pleasing beauty displayed.

In briefly noticing the nature and treatment of plants in vases, they require a *rich soil, moderately light*, but at the same time *retentive of moisture*; a mixture of loam of a friable texture, enriched and lightened by the addition of leaf mould and dung, in a state of decomposition, will, in general, answer well. In putting this into the open space in the centre, place a layer of the *more coarse and turfy portions at the bottom*. In turning in the plants (which should have been previously hardened in a cold frame) care must be taken to preserve the roots without injury, more especially of the *annual kinds*; place the highest growing plants in the centre (see list No. 1), and fill round with dwarfer kinds (No. 2), the extreme edge being finished 'with creeping or trailing plants, to decorate the whole with their long drooping branches, and pretty flowers.' It is hardly necessary to remind the most inexperienced, that *constant attention to watering is indispensable*; indeed, without attention to this, it would be absurd to attempt the culture of plants under such circumstances.

When judiciously employed and filled with showy plants, there are few appendages to a garden of a more ornamental and interesting nature.

The annexed list of plants are adapted for vases, &c.

No. 1.

Plants not exceeding one foot and half, adapted for the centre of vases.

Schyzanthus Grahami
Hookerii
Diffusa
Pinnatus humilis
Priestii
Galliopsis Atrosanguinea
diversifolia

Eutoca viscida
Petunias
Alonsoa incisifolia
Lotus jacobaeus
Verbena. The following are
some of the best:

Drummondii
Lambertia
Aubletia
Pulchella alba
Hylandsi

Ineisa
Nivenii or Teuerivides
Senecio elegans plena
Geraniums
Calceolarias shrubby

No. 2.

Plants of a dwarfer habit, adapted for vases.

Lantana mutabilis
sellowii
Chamedryfolia
Niremburgia Calycina
intermedia
Lobelia corymbosa
Bouvardia tryphilla
Statice puberula
Heartsease, in shady situations
Gilea alba
tenuifolia
Collinsia grandiflora

Bartonia aurea
Leptosiphon rosaceum
densiflorum
Cuphea silenoides
Lobelia lutea
cerulea
gracilis
Campanula garganica
fragilis
diffusa
Nemophylla atomaria
insignis

No. 3.

Plants of creeping or trailing habits, adapted for the edges of
of vases.

Nolana atriplicifolia
Convolvulus. Varieties
Tropaeolum atrosanguinea
aduncum
Thunbergia alata
alba
Anagallis. All the varieties
Ipomea. All the varieties

Verbena melindres eana
major tweedi-
grandiflora
arranana
Lophospermium scandens
Rhodochiton volubile
Maurandia Barclayana
lucida
Loasa aurantiaca

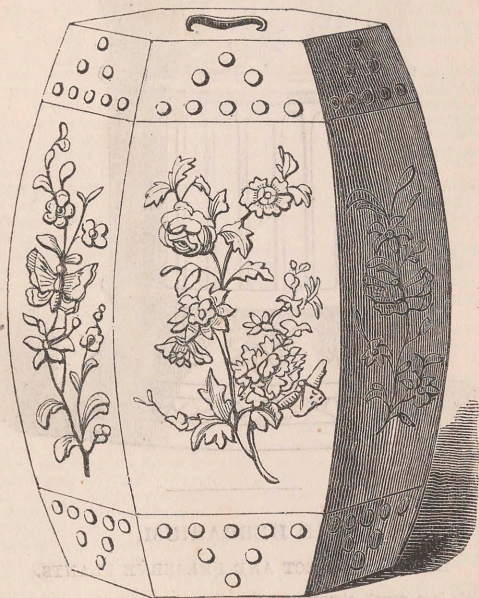
There are many others equally applicable; but the above are a few of the best, and are within the reach of the humblest amateur."

ASPECT OF A GARDEN.

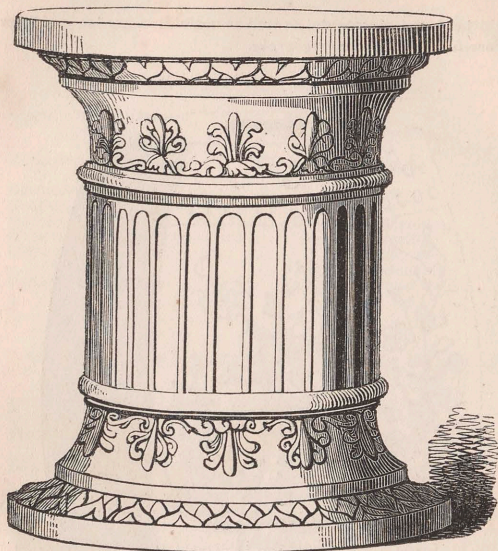
A good aspect for a garden is universally allowed to be that which has a gentle declivity towards the south, and inclining rather to the east, in order that it may receive the benefit of the morning sun. A north aspect is unfavourable for general purposes, it being always cold and late; nevertheless it must be admitted that such an aspect is not without its advantages in summer, by retarding many plants which would otherwise be brought to maturity too soon.

PORTABLE SEATS

will be found ornamental as well as useful in a garden ; of these *Porcelain* are the most *recherché*.



The sexagonal form is most frequently used, but the columnal is more classical and imposing.



THE HERBARIUM.

HOW TO COLLECT AND PRESERVE PLANTS.

This is a much simpler process than is generally imagined by those unpractised in it, and travellers have been often deterred from collecting specimens by the time and trouble required for preparing them in the way that has by many been recommended.

The chief circumstances to be attended to are, to preserve specimens of plants in such a manner that the moisture may be quickly absorbed, the colours as much as possible preserved, and such a degree of pressure given to them, as that they may not curl up in the act of drying.

For this purpose let a quantity of separate sheets of paper be obtained of a folio size. Common brown paper is upon the whole the best, except for the very delicate kinds, which require paper of a smoother and somewhat more absorbent texture. Blotting paper, however, especially in warmer climates, would absorb the moisture too rapidly, and by repeated damping and drying would soon be rendered useless.

Two boards should be provided,—one for the top, and the other for the bottom of the mass of papers.

For pressure at home or when stationary for any length of time in a given spot, nothing serves better than a weight of any kind (a folio book, or a large stone, &c.) put upon the topmost board; and the great advantage of this is, that the weight follows the shrinking of the plants beneath.

Whilst travelling, three leathern straps with buckles should be procured; two to bind the boards transversely, and one longitudinally. It will be further desirable to have a number of pieces of pasteboard of the same size as the paper, to separate different portions of the collection, either such as are in different states of dryness, or such as by their hard woody nature might otherwise press upon and injure the more delicate kinds.

Thus provided, gather your specimens,—if the plants be small, root and stem,—if large, cut off branches of a foot or a foot and a half long; selecting always such as are in flower, and others in a more or less advanced state of fruit.

Place them side by side, but never one upon another on the same sheet, and lay upon them one, two, or three sheets, according to the thickness of the plants, or their more or less succulent nature; and so on, layer above layer of paper and specimens, subjecting them then to pressure.

As soon as you find that the paper has absorbed a considerable portion of the moisture, (which will be according to the more or less succulent nature of the plants and the heat or dryness of the season or climate,) remove the plants into fresh papers and let the old papers be dried for use again, either in the open air or sun, or in a heated room, or before the fire.

As to the spreading out the leaves and flowers with small weights, penny pieces, &c., it is quite needless. The leaves and flowers are best displayed by nature in the state in which you gather them, and they will require little or no assistance with the hand, when laid out upon papers, to appear to the best advantage, especially if put in carefully on being fresh gathered.

If the specimens cannot be laid down immediately on being gathered, they should be preserved in a tin box, or failing that, in a rush basket, where they will keep fresh for a day or two, if the atmosphere be not very much heated.

Some very succulent plants, such as Cacti, Semperviva, Seda, Ochideous plants which grow on trees, &c., require to have the specimens plunged in boiling water for a few seconds before they are pressed, to destroy life and thus accelerate the process of drying.

Plants with very fine but rigid leaves, as the Fir tribes and the Heaths, and some with compound winged leaves, to prevent their leaves falling off or their parts separating, may either be treated in the same manner, or dried in very hot paper or with a hot iron.

In many cases, especially in warmer climates, the traveller will find the process accelerated by exposing the parcel (hung up and properly secured) to the open air when the weather is favourable, and the circulation of air through it, will be promoted if the sheets on which the specimens are laid be placed alternately back and edge. In tropical countries he will find it necessary to shift his specimens at least once a day, and by changing them into hot paper, and crowding such specimens as are dry, he will be enabled to form a considerable collection in a small compass, and in a very short time. Four or five shiftings will generally be sufficient to complete the process, which is ascertained by the stiffness of the stems and leaves, and by the specimens not shrinking when removed. They should then be placed between dry papers and formed into parcels of moderate thickness, and either packed in boxes or well secured as parcels covered with oil-cloth.

Palms, having their fructification and leaves very large, can hardly be subjected to pressure: a few flowers should be pressed, and the whole cluster of flowers and fruit, as well as a leaf, may be simply dried in the air, and afterwards packed in boxes for transportation.

The greater number of Cryptogamic plants may be dried in the common way, such mosses as grow in tufts being separated by the hand. But both mosses and lichens, as they can at any future time be expanded by damping, may be dried by the traveller without pressure and put up, either each species separately or several together, in small canvass or paper bags, carefully marking the place of growth and the date when gathered.

If the fruit of plants are of a small size so as to be preserved in a herbarium, they should be gathered with the leaves and branches as are the flowers; if of a large size they should be kept separate.

Dry fruits demand no care, except that those which split into valves should be tied round with a little packthread.

Pulpy fruits are only to be preserved in spirits, or in pyroligneous acid diluted in the proportion of eight parts of water to one of the concentrated acid. In all cases the separate fruits, whether dry or preserved in a fluid, should have a number attached to them, referring to the flowering specimens of the plants. Seeds, whether for examination or intended to be sown, should be gathered perfectly ripe, put up in brown paper bags, and kept dry in a box.

With the specimens, fruits and seeds, there should be slips of paper, on which are to be written the uses, native names, and general appearance of the plant, whether herbaceous, a shrub, or tree, its sensible qualities, and the colour and form of the flowers; its situation, if dry or damp, the nature of the soil, the elevation above sea level, and the date when gathered.

As soon as a sufficient number of specimens are collected, no time should be lost in transporting them to their place of destination, since, in warm climates especially, they are liable to the attacks of insects. These attacks, which are often completely destructive of the specimens, may in many cases be prevented by pitching the boxes, and by putting in them, or in each parcel, cotton dipped in petroleum, spirits of turpentine, or small pieces of camphor, and the captain of the vessel should be particularly requested to keep them in a dry or airy part of the ship.

Specimens of the woods of from six to eight inches in length,

the entire round of the trunk or branch of small, and segments from centre to circumference of the larger kinds, in both cases with the bark, should also be preserved—not only of the more remarkable trees, but also of the woody climbers, which often exhibit peculiarities of structure highly interesting to the botanist. When specimens of wood are preserved, they should be marked with numbers corresponding with the flowering branches of the tree in the collection of specimens; and when flowers cannot be obtained, a small branch with leaves or fruit should always be taken.

Gums, resins, and other remarkable products should also be collected, there uses if known noted, and reference made by numbers to the plants they belong to.

Useful and ornamental plants would of course form the most important parts of such collections; *but even the weeds of foreign and little known countries, the grasses, ferns, mosses, lichens, and sea weeds will prove extremely valuable to the scientific botanist.*

PRESERVED FLOWERS AND PLANTS.

Mr. LINDSEY, the intelligent manager of the gardens at Chiswick House, has just presented to the Medico Botanical Society, some very beautiful and highly preserved specimens of dried plants and herbs, retaining in a peculiar degree, the whole of the volatile oil and aroma, and the colour of the recent plants. The plan adopted, is to dry the substance in a dark and close room, and not, as is usually the case, by exposure to a current of air and the action of light. When the separation of the aqueous particles is effected by their evaporation, and they are tolerably dry, they are submitted to pressure in small quantities, enveloped in paper, until the oil appears on the surface, and which is known by its discoloration; by this, all change of colour by the action of the light, or further loss of volatile matters by evaporation, is prevented. In pot herbs, as well as medicinal plants, the improvement and superiority is very decided.

PRESERVING PLANTS DURING A VOYAGE.

Capt. R. GILLIES, of the ship *Hibernia*, communicated the following method to Messrs. Fox, given in the report of the Royal Cornwall Polytechnic Society. "In accordance with your wishes, I have much pleasure in describing to you the mode in which the plants brought by me from Calcutta were put up. The plants were all intended for the green-house in England, and I presume were of a delicate kind. Each plant was in a box, six inches square by one foot in depth, filled to the top with a kind of clay, and no doubt well saturated with water, previously to being put into the large outer box, which contained eight of these small ones. The large box was constructed in the usual way, that is, a glazed roof about two feet high, the glass strong enough to resist the fall of a

small rope, or other light body. It was hermetically sealed with the common lime cement of the country, and was never opened during a voyage of five months. When we arrived in England, the plants were all in beautiful health, and had grown to the full height of the case, the leaves pressing against the glass. In dry weather, I always observed moisture within the glass, which was caused no doubt by the evaporation of the earth, and was again absorbed by the plants. It is difficult to account for the perfect health of the plants, without the full admission of the atmosphere; but oxygen sufficient was probably admitted, either through the pores of the wood, or otherwise. It is, however, a fact, that no water was given to them during the voyage, and that they were landed in excellent order."

BOTANICAL OBJECTS

FOR THE

MICROSCOPE.

Kindly communicated by N. B. WARD, Esq.

DIFFERENT KINDS OF CELLULAR TISSUE,

as seen in the leaves of Mosses, Jungermannas, Ferns, &c. very beautiful in Sphagnum, the common Bog moss, in Jungermannia tomentalla, and numerous other species—in Hymenophyllum Tunbridgensis and Wilsoni, &c.; the whole of these tribes will repay the closest investigation.

MODIFICATIONS OF CELLULAR TISSUE.

In the coats (Testa) of many seeds, as in Maurandia Barclayana, in the seeds of most Orchideous plants, and particularly in Limodorum Abortivum, a native of the south of France, &c.

The fibro-cellular tissue is remarkable in the linings of the valves of the anthers in almost all plants.

The uncoiling of the spinal fibre of the testa of Collomia linearis, when a small portion of the seed of this plant is placed upon the stage of the microscope, and moistened with water, is a most splendid object, particularly when viewed by the light of the sun.

THE GLANDULAR WOODY TISSUE

of the Coniferae is readily seen by making a fine shaving of a common match.

THE SPINAL VESSELS

which are easily found in most plants; particularly abundant in the Banana, the Pitcher plant, &c.

THE STOMATES IN THE CUTICLE OF PLANTS

are very interesting objects, and are generally found in the greatest abundance on the under surface of the leaves; these are seen more clearly, and their true nature made more manifest, by charring the leaves according to the recommendation of the Rev. Mr. Reade.

MANY OF THE HAIRS OF PLANTS

are fine subjects for the microscope, especially the stellate hairs found on many species of *Aerostratum*.

RECEPTICLES OF SECRETION

in the flowering spike of common Lavender and numerous other labiate plants, and in the leaves of myrtaceous plants, &c.

POLLEN

of *Mirabilis Julapa*, *Stachytarphata mutabilis*, *Pancratium declinatum*, *Polygala spinosa*, *Armenia fasciculata*, *Plumbago rosea*, *Scorzonera radiata*, and numberless other plants

CIRCULATION OF FLUIDS

in various species of *Intella* and *Chara*; in *Valisneria spiralis*, *Hydrocharis mors ranæ*; in the hairs and the stem of *Tradescantia virginica*, &c.

CAPSULES OF NUMEROUS MOSSES.

Among these the most conspicuous are, *Funaria hygrometrica*, various species of *Bryum* *dieranum*, *Polytrichum*, *Arthotrychum*, &c. The hygromatic property possessed by the peristome (or fringe bordering the mouth of the capsule) can be easily seen in *Fumaria*, *Bryum*, &c. by breathing upon it when under inspection.

CAPSULES OF FERNS,

particularly of the following genera, viz.: *Osmunda*, *Schizaea*, *Aneimia*, *Hemionitis*, *Gymnogramma*, *Lindsoea*, *Pleopeltis*, *Polypodium*, *Cheilanthes*, *Davalnia*, *Dickinsonia*, *Woodsia*, *Cyathea*, *Cibotium*, *Trichomanes* and *Hymenophyllum*.—The whole of these are fine; but nothing can be conceived so beautiful as to witness under the microscope, the bursting of the capsule of the *Hemionitis rufo*, from the elasticity of the ring, and the consequent dispersion of the seeds or sporules. This may be witnessed in many of the ferns.

To this list may be added the numerous minute Fungi, inhabiting dead or decaying portions of vegetable or animal matter, and the whole of those innumerable subjects occupying the debateable ground on the confines of the animal and vegetable kingdoms, such as *Oscillatorias*, &c. &c. All these will most amply repay the trouble of their investigation.

Few of the above objects can be seen to advantage, excepting with a compound microscope with half inch, quarter inch, and in some cases one-eighth inch glasses. The cost of such a microscope would be from £25. to £30. The best makers that I know are Mr. Powell, Clarendon-street, Somers-town, and Mr. Ross, Regent-street.

NURSERYMEN

In the vicinity of London,

whose Gardens are within the distance of a convenient morning's drive, and whose collections will amply repay the amateur for three or four visits during the season.

- Battersea, Mr. N. Gaines (1)
 Chelsea, Messrs. Dennis and Co. (1)
 Mr. T. Knight, King's road (2)
 Messrs. Catleugh and Son (3)
 Clapton, Messrs. Low and Co. (4)
 Ealing, Messrs. Mountjoy and Son (5)
 Epsom, Messrs. Young and Co. (6)
 Fulham, Messrs. Osborne and Son
 Hackney, Messrs. Loddiges and Co. (7)
 Hammersmith, Messrs. Colley and Hill
 Lee (8)
 Kingsland, Mr. W. Alexander
 Maida-hill, Mr. Henderson, 9, Pine Apple-place (10)
 Mitcham, Mr. J. H. Millar (11)
 Paddington, Messrs. Hogg, (12)
 Shacklewell, Mr. T. Gellan, (13)
 Tooting, Messrs. Rollison (14)
 Vauxhall, Messrs. Chandler (15)
 Walworth, Mr. H. Groom (16)

- (1) Geraniums, Dahlias, &c.
 (2) Some of the finest plants of *Rhododendron Arboreum* in the kingdom, *Camellia Japonica*s, rare varieties of *Azalias*, New Holland plants, &c.
 (3) *Calceolarias*, Geraniums, *Ranunculus* and miscellaneous collection, rich in Heaths and New Holland plants.
 (4) For New Holland Plants, Cape Heaths, &c.
 (5) Heartsease, *Calceolarias* and Tulips.
 (6) Rich Miscellaneous collection.
 (7) Particularly devoted to the propagation of rare plants and Aquatics; also contains the best collection of Tropical green-house and hot-house Exotics of any commercial garden in the kingdom, perhaps in the world.
 (8) Unquestionably one of the first nurseries in the kingdom, if not in the world, for Seeds, Exotics, fruit and forest trees, Geraniums, and hardy plants.
 (9) Dahlias, &c.
 (10) Geraniums, Roses, and miscellaneous collection.
 (11) Dahlias, &c.
 (12) Auriculas, Heartsease, and Tulips.
 (13) Contains extensive hot-houses for forcing flowers, and green-house plants; also a botanic subscription garden.
 (14) For Camellias and other choice plants.
 (16) Heaths and *Calceolarias*.

NURSERYMEN

CELEBRATED FOR PARTICULAR CLASSES OF PLANTS.

Tulips and Auriculas.

Mr. Hogge, Paddington

Mr. Browne, Slough

*Heartsease.*Hogge, Paddington
Mountjoy, EalingLane, Berkhamstead
Paul, Cheshunt*Camellias.*Chandler, Vauxhall
Loddiges, Hackney

Knight, King's-road

*American Bog Plants.*Waterer, Knapp-hill
Maule, Bristol
Knight, ChelseaLoddiges, Hackney
Hammond, Bagshot
Browne, Slough*Roses.*Henderson, Pine-apple-gate
Rivers, Sawbridgeworth
Wood and Sons, Maresfield
Paul and Sons, CheshuntLane, Berkhamstead
Hooker, Brenchley, Kent*Geraniums.*Catleugh, Chelsea
Colley & Hill, Hammersmith
Groom, Walworth
Gaines, BatterseaDennis, Chelsea
Buck, Chelsea
Hopgood, Bayswater **New Holland Plants.*Lowe, Clapton
Loddiges, Hackney
Page, Southampton
Millar, BristolYoung & Penny, Godalming
Young, Epsom
Knight, King's-road*Calceolarias.*Chandler, Vauxhall
Rollison, Tooting
Young, EpsomMountjoy, Ealing
Catleugh, Chelsea*Heaths.*Lucombe & Pince, Exeter
Lowe, Clapton
Loddiges, HackneyRollisons, Tooting
Henderson, Pine-apple-gate*Miscellaneous.*Loddiges, Hackney
Henderson, Pine-apple-gate
Lowe, Clapton
Lee & Kennedy,
Knight, King's-roadYoung, Epsom
Page, Southampton
Young & Penny, Godalming
Lucombe & Pince, Exeter

* For cheap balcony roots, 9d. and 1s. each.

Dahlias.

Chandler, Vauxhall
Young, Epsom

Browne, Slough
Mountjoy, Ealing

Chrysanthemums.

Chandler, Vauxhall
Smith, Dalston

Henderson, Pine-apple-gate

SEEDSMEN,

Some of the principal in London.

Batt, George, 412, Strand
Beck and Co. 67, Strand
Brown, T. and E. Egyptian Hall, Piccadilly
Carter, J., 238, Holborn
Charlwood, George, 14, Tavistock-row, Covent-garden
Cormack, Son, and Co., Bedford Conservatory, Covent-garden, and New-cross
Lockhart, Theodore, 156, Cheapside
Nash, Adams, and Co., 63, Strand
Noble, W. and J., 152, Fleet-street
Rogers and Co., Eaton-square, Pimlico
Warner and Warner, 28, Corn-hill

LIST

OF SOME OF THE PRINCIPAL

NURSERYMEN, SEEDSMEN, FLORISTS,

&c. &c.

Ashbourne	- Messrs. Godwin, Collycroft
Ayr	- Mr. James Smith
	Mr. Goldie
Barlow	- Messrs. Majerrison and Co.
Bath	- Messrs. Salter and Co.
	Mr. Caulier
Battle	- Mr. Knight
Beccles	- Messrs. Fenn and Law
Bedford	- Mr. S. Shephard
Berkhampstead	- Messrs. Lane and Son
Birmingham	- Messrs. Pope and Sons
	Mr. S. Yeates
Brechin	- Messrs. Henderson and Sons
Bristol	- Durham-Down Nursery
	Mr. J. Garaway
	Mr. Miller
Boston	- Mr. E. Willison
Calne	- Messrs. Heale and Son
Cambridge	- Mr. Michael Brewer
	Mr. Widnal
Cheltenham	- Mr. S. Hodges
Chertsey	- Mr. J. Cree

Chest
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Colham
Colbrook
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Glasgo
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Glasgo
Hawsw
Hatho
Hill
Hunting
Ipswich
Jersey
Kingsto
Knotho
Leeds
Layert
Liverpo
Lockbur
Malton
Manches
Market
Milford
Mossbur
Newcast
New-cro
Newyort
Norwich
* Contains
to the West

Chester	- Mr. Dixon Messrs. Edward, Walker and Co.
Cheadle	- Mr. J. Plant
Chichester	- Mr. H. Silverlock
Chippenham	- Mr. S. Hodges
Cheshunt	- Messrs. Paul and Son
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Cobham	- Mr. Waterer, Knapp-hill *
Colnbrook	- Mr. J. Small
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Doncaster	- Mr. Crowthie
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Farnham	- Mr. George Smith
Gateshead	- Messrs. Fallow and Co.
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Glazenwood	- Mr. Curtis
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Hatton, Yorksh.	- Mr. T. Miller
Hull	- Mr. E. P. Dixon
Huntingdon	- Mr. J. Wood
Ipswich	- Mr. Thomas Wild Messrs. Jefferies and Son
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Kingston	- Mr. T. Jackson
Knosthorpe	- Mr. Major
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Liverpool	- Mr. Skerving
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Market Drayton	- Messrs. Goodwin
Milford	- Mr. Robert Coe Messrs. Penny and Young
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New-cross	- Messrs. Cormack and Co.
Newport (Salop)	- Mr. T. Adams
Norwich	- Mr. Mackay

* Contains forty acres of American plantation, partly wild, partly cultivated;
is the finest collection of its kind in the kingdom.

† Celebrated for a fine collection of Rhododendrons.

Northampton	- Mr. Atkins
Nottingham	- Mr. C. Adams
Oakham	- Mr. E. Banton
Odham	- Mr. John Shilling
Oxford	- Mr. J. Bates
	Mr. Humphries
	Mr. Wheeler
Pendaves	- Mr. J. Mitchelson
Pitdown	- Mr. James Mitchell
Plymouth	- Mr. W. Rendle
	Mr. A. Pontey
Pontefract	- Mr. J. Jones
Reading	- Messrs. Sutton and Son
Salisbury	- Mr. R. W. Squibb
Sawbridgeworth	- Mr. Rivers
Sheffield	- Mr. James Barron
	Mr. R. Turner
	Mr. T. Appleby
Shipston-on-Stour	- Mr. E. Day
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Stratford	- Mr. Garvies
Stroud	- Mr. W. Foster
Taunton	- Messrs. Hammond and Stevens
	Mr. Smith
	Mr. Young
Thame	- Mr. J. Clisby
Tillbrook	- Mr. John Hutchins
Trowbridge	- Mr. S. Walters
Uckfield, near	- Mr. James Cameron
Maresfield	- Messrs. Wood and Son
Wakefield	- Mr. W. Barratt
Wallingford	- Messrs. Tyso and Sons
	Mr. J. Harris
Warminster	- Mr. G. Wheeler
Warwick	- Mr. J. Phillips
Watlington	- Mr. R. Freestowe
Westerham	- Mr. J. Cottell
Whitby	- Mr. Williamson
	Mr. Wilson
	Mr. Willison
Wolverhampton	- Mr. J. Moore
Worcester	- Mr. J. Smith
Worthing	- Mr. E. H. Fuller
Woking	- Mr. Cobbett
Winchester	- Mr. Shephard
Yarm, (York)	- C. Hedley and Sons
Yarmouth	- Messrs. W. and H. Youell
Yeovil	- Mr. C. Pearce
York	- Mr. Edwards
	Mr. J. Backhouse

LI
Beyers Park
Chawick
Kew
Chelsea
Edinburgh
Glasgow
Dublin
Belcast
Liverpool
Manchester
Birmingham
Cambridge
Sheffield
Bury St. Edmunds
Oxford
Hall

HORTIC

FLOR

Aberdeen Horticultural
Aldington Hor. Assoc.
Alwick Horticultural
Andover Canarian
Annandale (Voyage)
Ashbourne Flor. &
Astringham Florist
Auchenhourie and
Aylesbury Horticult.
Barnet Horticulture
Barns-under-Need
Bath (Royal) Hor. &
Bathurst Horticult.
Beccles Horticulture
Bedfordshire open
Grand
Belmont Horticulture
Berks (Royal) Hort.
Berwick-upon-Tweed
Beverly Horticult.
Biggleswade Horticult.
Birmingham Botani
Grand
Eoss Horticultural

LIST OF BOTANICAL GARDENS.

Regent's Park	Royal Botanical Society's Garden	
Chiswick -	Horticultural Society's Gardens	Mr. Thompson
	Stafford House	- - Glennys
Kew	Royal Gardens	- - Alton
Chelsea	Physic Gardens	- - Anderson
Edinburgh	Royal Botanic Gardens	- - Wm. Macnab
"	Caledonian Horticultural Gardens	- - Jas. Macnab
Glasgow	Botanic Gardens	- - S. Murray
Dublin	College Botanic Gardens	- - Mackay
"	Glasnevin Botanic Gardens	- - Nevin
Belfast	Botanic Gardens	- -
Liverpool	Ditto	- - H. Sheppherd
Manchester	Ditto	- - B. Campbell
Birmingham	Ditto	- - D. Cameron
Cambridge	Ditto	- - Biggs
Sheffield	Ditto	- - R. Marnock
Bury St. Edmunds	Ditto	- -
Oxford	Ditto	- - Baxter
Hull	Ditto	- - D. Smith

PROVINCIAL
HORTICULTURAL, BOTANICAL,
AND
FLORICULTURAL SOCIETIES.

Aberdeen Horticultural	Blackburn Flo. and Hor.
Abingdon Hor. Association	Bolton Floricultural and Hor.
Alnwick Horticultural	Brighton Floricultural
Andover Carnation	Brighton and Sussex
Annandale (Upper) Horticultural	Bristol Horticultural
Ashborne Flor. and Hor.	Buckingham Horticultural
Attringham Floral & Horticultural	Burton-upon-Trent Horticultural
Auchenbourtie and Plean Hor.	Bury Horticultural
Aylesbury Horticultural	Calne Horticultural
Barnet Horticultural	Caledonian Horticultural
Barton-under-Needwood Hor.	Cambridge Amateur Florists
Bath (Royal) Hor. and Botanical	Florists' Society
Banffshire Horticultural	Grand Dahlia Show
Beccles Horticultural	Cambridgeshire Horticultural
Bedfordshire open Hor. Society	Chelmsford & Essex Flo. & Hor.
Grand Dahlia Show	Cheltenham Flo. and Hor.
Belfast Horticultural	Chesterfield Floricultural
Berks (Royal) Horticultural	Gooseberry Show
Berwick-upon-Tweed Hor.	Chester Flo. and Hor.
Beverley Horticultural	Chilwell and Beeston Florists
Biggleswade Horticultural	Chichester Horticultural
Birmingham Botanical and Hor.	Chippenham Dahlia Show
Grand Dahlia Show	Cirencester Horticultural
Biss Horticultural	Clackmannanshire Horticultural

- Colchester Flo. and Hor.
 Conisborough Horticultural
 Cork Horticultural
 Cornwall (Royal) Hor. Society
 West District Gardening
 Coventry and Warwickshire Hor.
 and Flo.
 Cuckfield Horticultural
 Cupar Horticultural
 Denton Tulip Exhibition
 Derby and Derbyshire Hor. & Flo.
 Devonport Horticultural
 Devon and Cornwall (Royal) Hor.
 Devonshire Horticultural
 Devon (North) Horticultural
 Diss Horticultural
 Doncaster Horticultural
 Dorchester, Sherborne, & Yeovil
 Horticultural
 Dorsetshire Horticultural
 Douglas Horticultural
 Durham (South) & Cleveland Hor.
 Dumfriesshire Horticultural
 Dumfermline Horticultural
 Dover Horticultural
 Eastern Border Horticultural
 East Dereham Floricultural
 Edinburgh Horticultural
 Farringdon Agricultural
 Farnham Horticultural
 Feversham Horticultural
 Fife Horticultural & Floricultural
 Forres and Nairn Horticultural
 Gloucestershire Zoological and
 Botanical
 Grantham Horticultural
 Groveferry Pink Show
 Green-street Horticultural
 Guernsey Horticultural
 Gwennap Cottage-gardening
 Hadleigh Horticultural
 Hagley & Stourbridge Horticul-
 tural and Floricultural
 Halifax Horticultural & Flor.
 Hampstead Florists
 Hampton Tulip Show
 Hants Horticultural
 Hartwell Gooseberry Show
 Henley Horticultural
 Hereford Society of Horticulture
 Hertford Horticulture
 Herts (North) Horticulture
 Highgate Floriculture
 Hodley-hill Horticulture
 Holt Horticulture
 Huddersfield Horticulture
 Hull Floriculture & Horticulture
 Hunslet Floriculture
 Huntingdonshire Horticulture
 Hurstpoint Floriculture
 Hurst Horticulture
 Ipswich Horticultural
 Ireland Practical Floricultural
 and Horticultural Society
 (Royal) Hor. Society
 Isle of Man Flo. and Hor.
 Jersey Horticultural
 Kelsoe Horticultural
 Kent and Canterbury Floricultural
 Kentish Town Dahlia
 Kettering Horticultural
 Kilmadock and Kincardine Hor.
 Kilmarnock Horticultural
 Kingscote Horticultural Society
 Kingston (Royal) Flo. and Hor.
 Kintbury Melon Show
 Kirkaldy Horticultural
 Kircudbright Hor. and Flo.
 Kirkheaton Horticultural
 Kirklington Gooseberry Show
 Knaresborough Hor. and Flo.
 Lancashire Gooseberry Shows
 Lancaster Horticultural
 Tulip Show
 Flower and Fruit Show
 Leeds Horticultural
 Leicester Floricultural and Hor.
 Lichfield Floral Exhibition
 Liversedge Floricultural and Hor.
 Louth Floral Society
 Lynn Horticultural
 Maidstone Horticultural
 Malton District Flo. and Hor.
 Manchester Flo. and Hor.
 Market Drayton Hor. and Flo.
 Marlborough Pink Show
 Middlesex Society Florists
 Montrose Horticultural
 Newcastle Botanical and Hor.
 Newport Horticultural and Flo.
 New Denton Horticultural
 Norfolk Horticultural
 Norfolk and Norwich Hor.
 Norwich Hor.
 Northampton, New Hor.
 North London Amateur Flo.
 North Riding (York) Hor. & Flo.
 Northern Horticultural (Ireland)
 Northumberland, Newcastle,
 and Durham Hor.

Nottingham Dahlia
 Odiham Dahlia Exhibition
 Oldham Flo. and Hor.
 Oswestry Floricultural
 Oxford Dahlia Show
 Paisley Hor. and Flo.
 Penrith Flo. and Hor.
 Perthshire Horticultural Society
 Pittville Association
 Plymouth Horticultural
 Pontefract Horticultural
 Ramsgate Carnations and Pinks
 Reading Horticultural
 Renfrewshire Horticultural
 Retford and Bawtry Hor.
 Ripon Floricultural
 Romsey Horticultural
 Ross Horticultural
 Roxburgh Horticultural
 Salisbury Plain Dahlia Show
 Salop Horticultural
 Sampton Carnation Show
 Saxmundham Horticultural
 Sheffield Bazaar Florists
 Autumnal Flower Show
 Sherborne and Yeovil Hor.
 Sneinton Carnation Show
 Southampton Hor. and Flo.
 South London Floricultural
 South Essex Floricultural
 St. Andrew's Hor. and Flo.
 St. Neot's Horticultural
 Stamford-hill Floricultural
 Stamford Flo. and Hor.
 Stafford Flo. and Hor.
 Staffordshire (North) Hor.
 Stirling Horticultural Society
 Stowmarket Horticultural

Sunderland Friendly Florists
 Sutton Bengo Floricultural
 Sydenham Pinks
 Swansea and Neath Hor.
 Tamworth Horticultural
 Taunton Horticultural
 Thornby Horticultural Society
 Tipperary Horticultural
 Trentham Floricultural
 Tucangate Cottage Gardening
 Tunbridge Wells Horticultural
 Uttoxeter Hor. and Flo.
 Uxbridge Flower Show
 Vale of Evesham Floricultural
 Warwickshire Flo. and Hor.
 Waterford Horticultural
 West Hampton and Staffordshire
 Horticultural and Floricultural
 Weston Geranium Show
 West Riding (York) Hor.
 Wexford Horticultural
 Whitby Flo. and Hor.
 Whitehaven Horticultural
 Wilts Horticultural
 Winchester Carnation
 Windsor and Eton Hor.
 Wingham Hor. and Flo.
 Wisbeach Hor. and Flo.
 Wolverhampton and Stafford-
 shire Hor. and Flo.
 Worcestershire Hor. and Flo.
 Wrexham Horticultural
 Yarmouth Horticultural
 York Ancient Florists
 York Horticultural
 Yorkshire, Beverley, and East
 Riding Hor. and Flo.

FOREIGN NURSERYMEN,

AND

BOTANIC GARDENS.

Hamburgh	-	Messrs. James Booth and Co. Flotbeck
"	-	Messrs. Brockman and Son
Berlin	-	Royal Botanic Gardens—M. Otto
"	-	M. Bouschie, nurseryman
"	-	M. Toussaint, ditto
Vienna	-	Messrs. Rosenthall and Son
"	-	M. Heald
Frankfort on Maine	-	M. F. Gruneberg and Son. M. King, jun., M.

[Bock

Dresden	-	M. Weber
"	-	M. Hofrath Breyssig
"	-	University Botanic Gardens—M. Lehman
Munich	-	Royal Botanic Garden—Mons. Seitz
Darmstadt	-	Gardens of the Duke of Darmstadt at Besungen—Mr. Noack
Mayence	-	M. Hock, nurseryman
Cologne	-	M. Theodore Henseller
"	-	Mrs. Foester
"	-	M. Fioelingsdorf
"	-	M. Jacob Mackay, nurseryman
"	-	M. Gallanpin
Antwerp	-	M. Van Geert, nurseryman
Brussels	-	Botanic Gardens—M. Van Houtte
Ghent	-	Botanic Gardens—M. Donkelaar
"	-	A. Verschaffelt fils, nurseryman
"	-	M. P. Verleawen, ditto
"	-	M. Van Geert, ditto
Lomain	-	Botanic Garden—M. Donkelaar, jun.
Paris	-	Botanic Gardens, or Jardin des Plantes
"	-	Vilmorin and Co. Jacquin, Fseres
"	-	M. Noissetee, nurseryman
"	-	Ms. Cels
"	-	Messrs. Lechevalier, Soulange, Boudin, Jardin de Fromont
Rouen	-	Monsr. Vallet, nurseryman
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Lyons	-	M. Simon Simons
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Versailles	-	Mr. John Salter, horticulteur
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SOME OF THE PRINCIPAL GARDENS IN THE KINGDOM,

Many of which may be viewed BY PERMISSION.

BEDS.	Duke of Bedford, Woburn Abbey—Mr. Forbes. The collection of Succulents si among the finest in England. Lady Tavistock, Oakleigh House Sir H. H. Hoare, Bart. Wandon Lord Holland, Ampthill Park Rev. William Mansfield, Milton Bryant—Mr. Fyffe
BERKSHIRE.	Sir G. Warrender, Bart. Maidenhead—Mr. Dodds Marquis of Downshire, Bracknell R. B. De Beauvoir, Esq. Reading J. Walker, Esq. Broadmead — Allmut, Esq. Wallingford R. Mangles, Esq. Sunning Hill

- BUCKS.** Duke of Buckingham, Stowe.
 Lady Grenville, Dropmore, Beaconsfield—Mr. P. Frost.
 Lord Carrington, Wycombe Abbey.
 Sir Griffin Wilson, Beaconsfield.
 P. D. Duncombe, Esq. Brickhill Manor.
 J. Du Pré, Esq. Wilton Park—Mr. McCulloch.
 Rev. R. Lowndes, Swanburn.
- CAMBRIDGE.** Earl De la Warr, Bourne Hall.
 Earl Hardwicke, Wimpole Hall.
- CHESTER.** Marquis of Westminster, Eaton Hall.
 Lady Broughton, Hoole House. The celebrated rock-
 ery here, is altogether unique, and the most splendid
 of its kind in the kingdom: the rockwork repre-
 sents the mountains of Savoy, with the valley of
 Chamouni.
 J. Cookson, Esq. Whitehill.
 T. Brocklehurst, Esq. Macclesfield.
 H. Bateman, Esq. Knyppersley Hall—Mr. Done. Here
 that very rare Orchideous plant, *Schomburgkia*
Crispum, or Spread Eagle, put forth a flowering
 stem last year, probably the first in this country.
 Rev. J. Thornecroft, Thornecroft Hall—Mr. Povey.
 Sir John T. Stanley, Alderley Park.
 — Barnetts, Esq. Macclesfield.
- CORNWALL.** Baroness Basset, Truro.
 Sir John St. Aubyn, Bart. Clowance. A celebrated
 American Aloe flowered in the year 1837, pro-
 duced 5088 flowers.
 Mrs. Lake, Falmouth.
 Sir Charles Lemon, Bart. Carclew—Mr. Booth.
 J. P. Magors, Esq. Redruth.
- CUMBERLAND.** Henry Howard, Esq. Corby Castle.
 Duke of Bedford, Endsleigh.
- DEVON.** Earl Fortescue, South Molton.
 Earl of Devon, Powderham Castle.
 C. Hoare, Esq. Luscombe House.
 J. Downes, Esq. Barnstaple.
 T. Harris, Esq. Kinsbury.
- DORSET.** Earl of Ilchester, Abbotsbury Castle.
 Hon. W. F. Strangways, Abbotsbury.
 H. C. Sturt, Esq. M.P. Critchill.
 Lord Rivers, Rushmore.
 Earl of Eldon, Encombe.
 Lord Portman, Bryanstone House.
- DERBY.** Duke of Devonshire, Chatsworth—Mr. Paxton. A prince-
 ly place—curious and intensely interesting species of
 plants “succulents.” The garden and green-houses
 remarkably rich for every description of exotic plant,
 which are maintained in the highest state of perfection.
 Earl of Shrewsbury, Alton Towers—Mr. Miller.
 Jesse Watts Russell, Esq. Ilam Hall, Dove Dale—Mr.
 Mason.
 E. Miller Mundy, Esq. M.P. Shipley Hall—Mr. R. Ayres
 R. Arkwright, Esq. Willmsley Castle, Matlock.
- DURHAM.** Earl of Durham, Lambton Castle.
 J. Bowerly, Esq. M.P. Streatham Castle.

- ESSEX. Lord Petre, Thorndon Hall.
S. Bosanquet, Esq. Forest House.
T. Perkins, Esq. Chipstead—Mr. Ivey.
Miss Copeland, Leyton.
R. Barclay, Esq. Leyton.
- GLOUCESTER. Duke of Beaufort, Badmington.
Earl Ducie, Woodchester Park.
Lord Northwick, Moreton in Marsh.
G. Holford, Esq. Tetbury.
Lord Ellenborough, Southam House.
Mrs. Dolphin, Eyford—Mr. Ryan.
Dow. Countess de Clifford, King's Weston. Contains fine American plants. The beauty and grandeur of the view towards the Severn and Avon renders this place one of the finest in the county.
- HANTS. Earl Carnarvon, High Clere. The finest American garden in the kingdom, celebrated also for its extensive park grounds, lakes, and artificial islands.
Duke of Wellington, Strathfieldsaye
Lord Ashburton, the Grange, Alresford—Mr. Steward—contains one of the most beautiful conservatories in the kingdom, measuring 70 feet in length, 45 feet in width, and 21 feet in height; it is built of cast iron, and in the architectural and horticultural proportions, much taste and judgment has been displayed.
Mr. Garnier, near Southampton
The Misses Garnier, near Southampton
J. W. Fleming, Esq. M.P. Stoneham Park
Sir Thomas Baring, Bart. Shatton Park, Paston
Sir G. T. Staunton, Bart. Leigh Park
Earl of Yarborough, Appuldurcome Park
Lord Stuart de Rothsay, High Cliff
Rev. G. Cumming Rashleigh, Hyde Lodge, Winchester
- HEREFORD. Lord Bateman, Shobden Court
A. Knight, Esq. Downton Castle
Sir G. Cornwall, Bart. Moccas Court—remarkable for a celebrated Weeping Oak; the only other specimen known, is in the gardens at Amsterdam.
- HERTS. Earl of Essex, Cashiobury—The gardens are very extensive, and laid out in the Chinese style.
Marquis of Salisbury, Hatfield
Dow. Lady de Clifford, Nyn Hall, Barnet
G. Byng, Esq. Wortham Park—Mr. Thomson
W. Harrison, Esq. Cheshunt—Mr. Pratt
T. H. Dorien, Esq. Berkhamstead
Sir A. Hume, Wormleybury—Large collection of Chinese and Indian plants.
Lady Clarke—Mr. Davis
Baron Dimsdale, Hatfield—Mr. Dunsford
Captain Trotter, Dunham Park—Mr. Cuthell
- KENT. Earl of Abergavenny, Tunbridge Wells
Lord Farnborough, Bromley—Mr. Skerrett—Gardens laid out in the French and Italian Style.
Mr. Wells, Redleaf, Tunbridge Wells—One of the most beautifully kept gardens in the kingdom.
H. Hoare, Esq. Staplehurst

D. Baillie, Esq. Hill Park
 Miss Trail, Bromley
 G. W. Norman, Esq. Bromley Common—Mr. Barns
 Jones Lloyd, Esq. Wickham—Mr. Bannan
 B. Boyd, Esq. Bromley
 T. Carey Palmer, Esq. Bromley
 Earl Stanhope, Seven Oaks
 Lord Rivers, Eltham Lodge
 Lady Anne Dashwood, Bexley
 Colonel Long, Bromley Hill
 Earl Amherst, Seven Oakes
 J. Wells, Esq. Bromley—Mr. Vernon
 Mrs. May, Sydenham—Mr. Wood
 J. Rogers, Esq. Jun. Seven Oakes
 H. Stone, Esq. Chislehurst—Mr. Salter

LANCASTER. Earl of Derby, Knowlesly Park
 C. Tayleure, Esq. Toxteth Park, Liverpool
 W. J. Myers, Esq. Aighburgh
 R. Harrison, Esq. Aighburgh
 J. Moss, Esq. Osterpool
 C. Horsfall, Esq. Everton.

LEICESTER. Duke of Rutland, Belvoir Castle
 Earl Howe, Gopsal, Bosworth

LINCOLN. Duke of St. Albans, Redburn Hall
 Lord Willoughby, D'Eresby, Grimsthorpe
 Sir R. Heron, Bart, Stubbon Hall
 C. Hackell, Esq. Bullington
 Earl of Lincoln, Sleaford
 Sir J. Thorold, Bart. Syston Park—Mr. J. Sharman
 Marquis of Exeter, Burleigh

MIDDLESEX. Duke of Devonshire, Chiswick—A large flower garden, range of hot houses 300 feet in length, and a group of aviaries for hardy birds.

Mrs. Lawrence, Drayton Green—The gardens are laid out in the most tasteful manner, and with the greatest skill. The proprietress is one of the *most successful* competitors for prizes at the various horticultural exhibitions.

G. Glenny, Esq. Whorton Lodge, Isleworth—A splendid collection of rare plants.

T. Farmer, Esq. Gunnersbury

Lord Ravensworth, Fulham—Mr. Brenon

Rev. T. Williams, Hendon Rectory

Viscountess Dillon, Bute House, Brompton—Mr. Bryant

Earl of Mansfield, Caen Wood, Hampstead—Tastefully arranged, and contains some fine American plants.

Duke of Bedford, Camden Hill—Mr. Caie—Remarkable for the extent and beauty of its flower garden, and for the elegance and taste displayed in its arrangement; during the whole of the season exhibiting a most splendid display of flowers.

Lord Holland, Kensington—Contains 63 acres of pleasure ground; garden laid out very tastefully;

- in this garden the Dahlia was first successfully cultivated in England.
- Duke of Northumberland, Sion House, Brentford—Contains a noble and extensive rookery, and splendid conservatory.
- Madame Rothschild, Acton—Mr. Miles
- Lady Banks, Spring Grove, Hounslow — Mr. J. Oldacre
- Duke of Buccleugh, Broughton House
- NORTHAMPTON. Earl Fitzwilliam, Milton
 Earl Cardigan, Deene
 Lord Southampton, Whittlebury
 Earl of Westmoreland, Apethorpe
 Lord Carberry, Laxton Hall
 Marquis of Northampton, Castle Ashby
 W. Russell, Esq. Pitsford Hall
 J. W. Russell, Esq. Biggen Hall
- NORFOLK. Marquis of Stafford, Crosley Hall—Mr. Wrighton
 Earl of Leicester, Holkham
 Bishop of Norfolk, the Palace
 H. Baring, Esq. Cromer Hall
 Lord Suffield, Gunton Park
 W. Brereton, Esq. Holt—Mr. R. Freestone
- NOTTS. Duke of Newcastle, Worksop Manor
 " " Clumber Park—In these rich and magnificent grounds, is a variegated Oak 35 feet in height
 Duke of Portland, Welbeck Abbey—M. Tillery
 Lord Galway, Serlby Hall—Mr. Parkin
 S. Duncombe, Esq. Langford
 S. Hole, Esq. Cauntton Manor—Mr. Hirst
 Earl Manvers, Thoresby Park—Mr. Bennett
- NORTHUMBERLAND. Duke of Northumberland, Alnwick Castle
 Earl Grey, Howick Hall
 T. W. Beaumont, Esq. Hexham Abbey
 Earl of Home, the Hirsell
- OXFORD. Duke of Marlborough, Blenheim
 Earl of Macclesfield, Sherborne Castle
 Sir H. Lambert, Bart. Aston House
 Earl of Shrewsbury, Heythorpe House
- STAFFORD. Duke of Sutherland, Trentham
 Earl of Harrowby, Sandon Hall
- SALOP. Marquis of Stafford, Shiffnal
 Lord Hill, Hardwick Grange—Mr. Barton
 Sir E. Kynaston, Bart., Hardwick Hall
- SUFFOLK. Lady Bunbury, Barton Hall
 Sir E. Kerrison, Bart. M.P. Brome Hall
 Duke of Norfolk, Farnham
 Earl of Stradbroke, Henham Hall
- SOMERSET. Earl of Egremont, Taunton
 Hon. and Rev. G. Neville Grenville, Burtleigh
 V. Stuckey, Esq. Langport
- SURREY. Lord Carhampton, Paine's Hill, Cobham
 T. Hope, Esq. Deepdeen, Dorking—one of the most tastefully laid out gardens in the kingdom—not extensive but highly romantic; *at all times open to the public.*
 Earl of Ripon, Putney Heath—Mr. Henwood

H. R. H. Duchess of Gloucester, Bagshot Park—Mr.
Toward—a most beautifully kept garden.

J. Janson, Esq. Stoke Newington

King Leopold, Claremont

Archbishop of Canterbury, Lambeth Palace
Haddington Park

Lord Grantley, Guildford

Sir E. Antrobus, Bart. Cheam

R. H. Jenkinson, Esq. Norbiton Hall, Kingston

Mrs. Marryatt, Wimbledon—Mr. Redding—The admirable skill and science exhibited in these gardens, render them *well* worthy the attention of every amateur. In these gardens is the *first* Magnolia Grandiflora that was introduced into this country.

W. Griffin, Esq. South Lambeth

W. Leaf, Esq. Streatham

— Clay, Esq. Stamford Hill—Mr. T. Blair

W. M. Christy, Esq. Clapham—Mr. J. Nash

J. W. Spicer, Esq. Esher—Mr. Wheatley

SUSSEX. Duke of Norfolk, Arundel Castle

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Duke of Richmond, Goodwood

R. Holland, Esq. St. Leonards

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A. B. Lambeth, Esq. Boynton House

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Mrs. Batt, New Hall, Salisbury—Mr. Evans

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WARWICK. Mrs. Taylor, Mosley Hall

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Elvelyn John Shirley, Esq. Eatingdon Hall

W. S. Dugdale, Esq. Merevale Hall

Marquis of Northampton, Compton Wynyates

G. Barker, Esq. Birmingham

W. Moore, Esq. Lychdon Lodge

J. Williams, Esq. Oldford

WORCESTER. Earl of Coventry, Croom Court

Lord Lyttleton, Hagley Park

Lord Foley, Witley Court

Lord Sudeley, Broadway

J. Knight, Esq. Woolverton House, Kidderminster

W. M. Moseley, Esq. Winterdyne House

E. Pytts, Esq. Kyre Park

Sir E. Winnington, Bart. Stanford House—in whose park is a very curious hermitage, and in the garden a Cedar of Lebanon more than *nine* feet in circumference.

YORK. Earl Fitzwilliam, Wentworth—Mr. Cooper

Lord Wharnccliffe, Wortley Hall

- Duke of Leeds, Hornby Castle
 Earl of Carlisle, Castle Howard
 Earl of Harewood, Wetherby
 Earl De Grey, Newby Hall—Mr. Douglass
 Lord Grantley, Grantley Park
 Lord Grantham, Newby Park
 Lord Scarborough, Sandbeck Park—Mr. Kempton
 Lord Howard, Thundercliffe Grange
 Lord Howden, Grimston Hall—Mr. Wymes
 Lord Stourton, Allerton Park
 Lady Downe, Benningborough—Mr. Foster
 Major Yarburgh, Heslington Hall—Mr. Fossett—Contains
 two variegated Oaks, each 35 feet high, with full 200
 heads, and 30 feet in breadth; also an Apricot tree of
 the Orange or Breada kind, the extent of the branches
 about 50 feet, and the height 30 feet; during the thin-
 ning season 10,000 fruit was gathered, leaving an abun-
 dant crop to attain maturity, on a soil of *only six inches*
of earth covering a bed of lime rubbish.
 Hon. and Rev. W. Herbert, Spofforth—The gardens are
 rich in curious bulbs and other rare plants.
 Sir George Cayley, Bart. High Hall
 Sir Joseph Copley, Bart. Spotborough
 Sir John Lowther, Bart. Wilson Castle
 Mrs. Lawrence, Studley Park—The pleasure grounds are
 perhaps the finest in England.
 T. J. Beaumont, Esq. Britten Hall
 — Rawson, Esq. Elcot Park
 J. Waterhouse, Esq. Well Head—Mr. J. Tate
 D. Greenhead, Esq. Huddersfield—Mr. J. North
 H. Cook, Esq. Curr House
 W. Oldfield, Esq. York
 H. Wilson, Esq. Berthwaite Hall—Mr. Braide
 G. Younge, Esq. Sheaf House—Mr. Appleby
 Clegg Stanley, Esq. Wakefield
 Sir Tatton Sykes, Bart. Sledmere Hall
 H. B. Osbaldeston, Esq. Hunmanby Hall
 Lord Macdonald, Thorpe Hall
 R. Bethell, Esq. M.P. Rise Hall
 R. Yorke, Esq. Wighill Park
 W. Danby, Esq. Swinton Park
 W. Marwood, Esq. Bushby Hall
 Hon. Mrs. Langley, Wykeham Abbey
 G. Osbaldeston, Esq. Ebberston Lodge—celebrated for the
 beauty of its natural cascades and waterfalls.
 Sir. R. V. Bempte Johnstone, Haikness Hall—Contains a
 large collection of exotic plants.
 Lord Feversham, Duncombe Park
 T. R. Beaumont, Esq. Whiteley Hall
 Sir John Lester Raye, Denby Grange
 Hon. Sir E. Marmaduke Vavasour, Bart. Hazlewood Hall
 Sir W. Amcotts Ingleby, Bart. Ripley Castle—The hot-
 houses are upon the largest scale in England.
 F. T. Lambert, Esq. Elland Hall
 J. Lowther, Esq. Swillington Hall
 J. Compton, Esq. Esholt Park.

THE GARDENS OF THE RECTORY OF HENDON,

Middlesex.

The residence of the Rev. THEODORE WILLIAMS,

is a place remarkable for its collection of Coniferæ, and other trees and shrubs cultivated in pots and vases, and dispersed through the flower garden during the summer. Such is the high state of keeping maintained here, that although the extent of the garden is only one acre and a half, a head gardener, a foreman, and other assistants are employed. And we can easily suppose that a garden of this extent, when managed in the superior manner here described, is infinitely more interesting than one of thrice the extent when cultivated in a common-place way.

It is a prevailing but most erroneous opinion, that the enjoyments derivable from a garden are just in proportion to its magnitude : so far from this being the case, at least in our opinion, we most decidedly believe that it would be conferring a most essential service to the science of gardening, either to lessen by one half almost every ornamental garden in the country, or allow double the amount of labour to that usually bestowed on them. In ninety-nine gardens in every hundred, it will be found that their extent is such, compared with the labour allowed for keeping, that the time and attention required for the nicer operations of the art, is almost if not wholly absorbed in the manual labour required in keeping in repair the beds, grass walks, &c. This ought not to be: the PLEASURES and ENJOYMENTS of a GARDEN by NO MEANS DEPEND ON ITS EXTENT, but on its HIGH STATE OF CULTURE and keeping.

The following is a list of the plants cultivated on this interesting spot.

Magnolias	... 10	Taxodium	... 4	Pyrus	... 1
Illicium	... 1	Juniperus	... 8	Cratægus	... 4
Berberis	... 2	Brhgmansia	... 1	Rosa	sorts 100
Pittosporum	... 1	Verbena	... 1	Calycanthus	... 1
Camellias	... 6	Robinia	... 1	Punica	... 1
Pavia	... 4	Kalmia	... 1	Philadelphus	... 1
Ilex	... 22	Petunia	... 1	Eucalyptus	... 1
Rhammes	... 8	Fuchsia	... 4	Passiflora	... 1
Cytisus	... 4	Myrtus	... 4	Ribes	... 3
Halimodendrom	1	Clematis, several		Hammamalis	... 1
Photina	... 1	Acer	... 1	Azalea	... 6
Hedera	... 5	Huarta	... 1	Andromeda	... 2
Viburnum	... 2	Æsculus	... 3	Myrsine	... 1
Aucuba	... 1	Kolruteria	... 1	Syringa	... 4
Arbutus	... 8	Vitis	... 1	Traxinus	... 2
Rhododendron	30	Curtisia	... 1	Daphne	... 4
Vaccinium	... 2	Euonymus	... 1	Aristolochia	... 1
Bumelia	... 1	Sophora	... 2	Ficus	... 1
Laurus	... 4	Cercis	... 1	Alnus	... 1
Buxus	... 4	Genista	... 1	Jagus	... 2
Quercus	... 23	Pistacia	... 1	Liquidamber	... 1
Olea	... 2	Ulex	... 1	Podocarpus	... 1
Chionanthus	... 1	Edwardsia	... 2	Ruscus	... 1
Taxus	... 2	Gleditschia	... 1	Dacrydium	... 1
Pinus	... 38	Gymnocladus	... 1	Larix	... 2
Abies	... 18	Acacia	... 2	Auracaria	... 5
Cedrus	... 2	Cerasus	... 1	Callitris	... 1
Thiega	... 3	Cotoneaster	... 1	Cupressus	... 2

LIST OF FLOWERING PLANTS, MODE OF PLANTING, &c.

(From Marnock's Floricultural Magazine.)

In selecting plants for filling up flower borders with Annuals and Green-house plants, it is necessary to know something of their habits; they may be creepers, or of dwarf stiff habit, still not growing higher than a few inches, or they may be plants of taller habits, Climbers, &c., some requiring training, others supporting themselves: be which of these they may, they must of necessity be such as will continue flowering the whole of the summer, and even through the autumn; these are generally denominated *perpetual flowering plants*. Some of the annuals are of this class, but of these, the greater part discontinue flowering, when the seed is perfected. A flowerless plant remaining until the seed is ripe, has an unsightly appearance, and is unfit for the neatly kept flower border. If it is pulled up as soon as the flowers are gone, a vacancy is left the remainder of the season: *quite the reverse with the perpetual flowering class* I am about to notice. It is true the flowering of many annuals may be retarded by *cropping off some of their flower buds or shoots during the former part of their growth*, which makes them keep in a growing state longer, and thereby causing new shoots to be produced, but these sometimes fail to produce flowers.

The description of perpetual flowering plants may be classed as follows:

1st, *those of dwarf habit*, either trailing or upright, are best for planting in front of the borders nearest the edge of the walks. In this class will be found the following: *Lobelia erinus*, *gracilis*, *lutea*, *bignoniiflora*, &c. *Phlox Drummondii*, *campanula fragile*, *garganica*, &c. *Nereburgia calycina*, *intermedia*, *philicailis*, *Statice alata*, *puberula*, *Verbena melindres*, var. *major*, var. *latifolia* *Sabine*, *S. alba*, *sulphurea*, *radicans*, &c. *Gorteria rigens*, *pavonia*, &c. *Heartsease* in varieties, *Houstonia*, *triphylla*, *lavigata*, &c. *Anagallis monelli*, *monelli major*, *monelligrandiflora*, *Anagallis*, *Webbiana*, *Phillipsi*, *Milleri*, &c. &c.

2nd, *those growing not more than a foot to eighteen inches high*, if trained up, but will also make a pleasing variety, if pegged down close to the ground, which, in my opinion, is the safest way of growing many green-house plants when turned out into the borders, as the winds cannot so soon break them; they are also more healthy and vigorous by being nearer the earth, and have a greater tendency to throw out lateral shoots, and in consequence, produce more blossom. And also the same description of plant may, for the sake of variety, be both staked up and pegged down; in this class will be *Heliotropium peruvianum*, &c., *Tournifortia heliotropioides*, *Lotus*, *Jacobeus*, *Chieranthus tristis*, *Malva capensis*, *Agathæa calestis* *Antierhinum*, *Molle*, *majus carryophylloides*, *Linaria*, several species, *Calceolarias*, shrubby and herbaceous, *Alonsa linearis*, *urticifolia*, &c., *Geraniums*, *Senecio elegans plena*, with many good kinds, as white, purple, red, crimson, &c. *Lythrum alatum*, *verbena incisa*, *Highlandsi*, *Tweediana*, *Arraniana*, *Drummondii*, *Aubletia*, *Lamberti venosa*, *pulchella*, *Niveni*, &c., *Tropæolum*,

minus pleno, Cinerarias in great variety. *Ænothera missourensis*, *macrocarpa*, *taraxifolia*, *Ononis rotundifolia*, *Crucianella stylosa*, &c., these may be planted at the distance of about from twelve to eighteen inches from the edge of the walk.

3rd, *those which exceed the height last mentioned*, if trained upright, in which class will be found *Fuchsias*, *Salvias*, *Cistus*, *Sutherlandia frutescens*, *Ænothera Drummondii*, *Argemone grandiflora*, &c., *Linum monogynum*, *Petunias*, *Roses*, *Tropæolum majus* pleno, *Reseda microphylla*, *Syphocampelus bicolor*, &c. &c.

4th, *perpetual flowering climbers which cannot be depended upon to live through our winters*, and of course require protection in frames or green-houses, and may be planted out in May or June. This description of climber grows fast, and is very desirable for covering trellis work, ornamental trainers of every description, or the pedestals of rustic houses, &c. The following are amongst this class *Maurandia*, *Barclayana*, and *semperflorens*, *Eccremocarpus scaber*, *Rhodochiton volubile*, *Cobea scandens*, *Lophospermum erubescens* and *scandens*, *Loasa aurantiaca*, *Lonicera flexuosa*, *Thunbergia alata*, and *alata alba*, *Tropæolum canariense*, *tuberosum*, &c.

ON THE

CULTIVATION OF MIMULUS MUSCHATUS.

From Marnock's Magazine.

For the introduction of this pretty little plant we are indebted to the unwearied labours of the late unfortunate Mr. Douglas, whose melancholy fate every lover of floriculture must sincerely regret. It is a valuable acquisition to the treasures of the flower garden, inasmuch as it is calculated to adorn the circumscribed space of the humble peasant as well as the more extended domains of princes and nobles. The soft hairiness of its stems, its bright yellow flowers, and its pure smell of musk, are its three chief recommendations.

I must now observe that I have cultivated this plant for several years, both in pots and the open ground, and much better in the latter than the former. It dies down during the winter months, but on the return of spring, when all nature revives, numerous young ones arise from the old roots; these, when they have attained the height of four or five inches, if carefully taken up, will make good strong plants for flowering the same season; and cuttings will also strike very freely. To flower it in perfection, a shady, damp situation, and peat soil, appears to be necessary. As a striking proof of its hardiness, I had several plants that stood the severe winter of 1838 without the least covering over the roots.

The *Mimulus muschatus* is one of the very best plants for growing in the windows of rooms that we know, and for standing in niches and tables of entrance halls and lobbies.

CLEMATIS SIEBOLDII. *Siebold's Clematis.*

The cultivation of this interesting and beautiful twiner has now become very general; it is still much in request, and highly esteemed by all who devote their attention to ornamental plants. It is a native of China, and was introduced from thence by S. Siebold, the indefatigable botanist, whose name it commemorates. We are not aware, however, that in *any instance where* it has been exposed to the severe frosts of our two recent winters, it has been killed. It has in some instances died down to the ground, but it sprung up again the following year; and, we believe, it is deserving of the character generally given to it, namely, that it is a *hardy plant*. It is certainly an *exceedingly beautiful one*, and is an early and *most abundant bloomer*: and for superior situations, such as covering trellis work and verandas in front of dwelling-houses, we know of no plant better adapted for the purpose than this.

Dr. Lindley says, "This very handsome plant is certainly a mere variety of *C. florida*, from which it differs principally in the clearness and brightness of the colour of the flowers, and in being of rather more robust growth. It is about as hardy as that species, and one of the *very best climbing plants that has been introduced for many years*. Trained to some well contrived basket-work fixed upon a pot, and protected by a green-house from rain and other causes likely to dim its colours, it ought to form one of the *most striking showy plants ever seen*."

It may now be purchased in the nurseries at from 7s 6d. to 10s 6d. per plant, according to its size.

BALCONY FLOWERS,

Cheap, hardy, and durable.

Wall flowers	Ne plus ultra
Brompton ten week stocks	Red Rover
and mignonette	Colleganum
Geraniums at 9d and 1s each	Hydrangeas (in double pots)
Man of Ross	Oleanders ditto
Lord Yarborough	Lobelia fulgens ditto
Brighton hero	Heartsease

FLOWERS FOR BALCONY FESTOONS.

Lophospermum rhodochiton.

FOR VERDURE.

Cobea

FOR PERMANENT ARCHWAYS IN GARDENS.

Clematis viticella purpurea
Florida
Florida plead

Honeysuckle and Jasmin,
the yellow variety and
the white

"DESIDERATA"

of Foreign plants, not yet or very partially introduced into Europe.

- 1 Cavendishii Nobilis, from Huanico, South America.
- 2 Amherstia Nobilis, from Burmah.
- 3 Kingia, Swan River.
- 4 Nuytsia Floribunda, do.
- 5 Genus allied to Chamelancæum, from Swan River.
- 6 Chloreas, from Mexico.
- 7 The African Tropæolum, found wild at Ascension: the other species known being all *American*.
- 8 *Blue* Acacia, from Nubia; seen by Captains Irby and Mangles, and mentioned by Pockville.
- 9 The plants bordering the salt water flats at the South end of the Dead Sea.
- 10 The 1200 varieties of seeds collected by the Spanish botanist in the Polynesian Islands; the whole collection was lost by shipwreck, (see the account by the Rev. Mr. Williams, the Missionary.)
- 11 *Blue* Tropæolum, from the Bell of Quillota, 60 miles from Valparaiso.
- 12 Large yellow Tropæolum, from the same place.
- 13 For Ward's frames—several interesting plants, from South America, which even in Chili do not produce seeds freely.

EXPENCES OF

THE ROYAL PARKS AND GARDENS.

			£	s.	d.
St. James', Green, and Hyde Park	...	...	9461	17	5
Kensington Gardens	...	...	1552	14	10
Regent's Park	...	...	3956	6	1
Richmond Park	...	...	4039	9	5½
Hampton Court Gardens	...	...	597	4	3
Windsor Park	...	...	10,314	9	3½
Kew Gardens	...	...	593	13	9
Total	...	...	30,515	15	1

HARDY SHRUBS IN WINTER.

Though protection during the winter in not indispensable for hardy shrubs, yet there can be no doubt that they are *much better for it*, causing the shoots to be more vigorous the following summer than those which have stood the winter "pelting of the pitiless storm."

COMPARATIVE PROPERTIES OF SOIL.

It is admitted by all gardeners, that the soil best calculated for general garden purposes should be of rather a light, rich, friable, loamy texture; dry, mellow, and capable of being wrought at all seasons, and of a good depth, that is, from two feet to three feet and a half, and that the worst kinds are those of the very light, sandy, and stiff clayey texture. A loam of a middling texture, rather inclining to sand, will be found the most suitable for the majority of plants. If the soil be too strong, the roots of plants push weakly into it, and are apt to canker and perish: if too light, and at the same time poor, the roots will wander far in search of nourishment, and be unable to collect a sufficient quantity for their support and maintenance. *It is a false principle to depend upon manures entirely*, for were they to be had in the greatest abundance, a too free application of them would have effects highly injurious to the quality of plants in general. In the formation of a garden, a moderate and prudent expense should be bestowed at the beginning, if the undertaking is to be ultimately crowned with success and satisfaction.

Strong stubborn clays are to be avoided, being the most unfit of all others, as few plants will prosper in them. Sand, lime, chalk, and coal ashes, correct the tenacity of clayey soils, and make them work more pleasantly: the former, if sharp, or if it be river or sea-sand, with a mixture of shells, will, if dug in in a sufficient quantity, render it of a lighter texture. Chalk should be spread on the surface in autumn, so that the whole may be pulverized by the action of the winter's frost and rains, and dug in in the spring. It corrects the acidity of the clay, and renders it at the same time more friable. Lime acts much in the same way, but should be used more sparingly. Coal-ashes have much the same effect upon stiff soils. Lime-rubbish dug in, is a good corrector of stiff soils, and is less objectionable than the coal ashes. Decayed tanner's bark, bog mould, or any vegetable mould applied to strong soils, lightens them considerably. Such soils cannot be too much wrought by the spade; every opportunity should be taken to ridge and rough-dig strong soils; and such operations should not be done in wet weather, nor when the ground has been saturated with wet.

Gravelly soils are also very unfit for garden-ground; as being generally of themselves sterile, and not readily enriched by manures, the finer particles are generally washed off by the rains. Light, sandy, or even gravelly soils are, however, not without their advantages, because they are much warmer, and by affording a much less quantity of moisture, the plants will not grow too luxuriantly. Early spring and winter plants are not only much earlier on sandy soils than upon clayey, but are also much more capable of resisting the frost.

In procuring mould, either for renewing or improving the soil, care should be taken to prefer such only as is *near the surface*, as that is in general the most productive, and is in reality the *true vegetable earth*. The top spit, that is, to the depth of one foot from the surface of any common or field, which has not been cropped, is to be preferred, and the fuller it is of fibrous matter, the better it will prove for the growth of the plants.

VARIETY AND PROPERTIES OF MANURE.

From the Gardener's Manual.

"THE manures in general use in gardens are numerous, but we shall only notice those which are considered the most useful; and of these, the dung of horses, if not the best, is certainly the most general in use. Next to the dung of horses, that of oxen and cattle is in the greatest request, and, if slightly fermented, is an excellent manure for light hot soils; it is also well calculated for soils of a dry absorbent nature, as it retains its moisture for a greater length of time than most others.

Green vegetable matter is an excellent manure, but less attended to than it ought to be. Instead of collecting all the weeds, useless vegetables, &c. in a garden into one heap, let the following simple mode be adopted:—When a piece of ground is going to be dug, go round and collect all the decaying vegetables, and immediately dig them in. The sweepings of grass-walks and lawns are also of much use as a vegetable manure; and on being brought every day into the garden, they should be dug in, before fermentation commences. But it must be observed, that they should not be buried at too great a depth, otherwise fermentation will be prevented by compression and the exclusion of air.

Sea-weeds, where they can be procured, make excellent manure for most vegetables, but particularly for sea-kale, artichokes, and asparagus. This manure, however, is very transient in its effects, and does not last more than for a single crop, which is accounted for by its containing a large portion of water, or the elements thereof.

The dung of birds, either wild or domesticated, affords a powerful manure, particularly that of the former. Pigeons' dung was and still is in great repute; but it should only be used as a compound, or, if used as a simple manure, the greatest care must be observed in the distribution of it. It has been found to be the best manure for strawberries of any that has been tried.

The dung of sheep and deer affords good manure, but is seldom used in gardens. Soot is a very powerful manure, and ought to be used in a dry state, and thrown on the surface of the ground. It has been advantageously used in crops of onions. It is sown at all times with good effect, and where it has been sown, no maggot has appeared.

The ashes of wood, if not too much burnt, are considered to be a lasting manure: they are generally sown amongst turnips, and are supposed to be of use in protecting them from the fly.

Of all mineral manures, lime is most known, and generally used: it should, however, never be applied with animal manures, unless they be too rich, or for the purpose of preventing noxious effluvia. It is injurious when mixed with any common dung.

Manures, whether animal or mineral, are of such importance to vegetation, that all possible diligence should be used in the collecting and preparing of them for the different purposes for which they may be required. By a proper application of them, and by a rotation of cropping, founded on just principles, the worst garden-ground may be not only improved, but rendered fit for the production of every vegetable that is usually cultivated in these islands."

GREEN-HOUSE PLANTS IN WINTER

if in rooms, and the weather is *very* severe, set a pail of water near them at night, or burning two or three rushlights will often preserve them from frost.

HARDY GREEN-HOUSE PLANTS

should be kept chiefly in the shade during the summer months, but *never* under the droppings of trees. AIR is of consequence to all plants, but *care* must be taken to prevent them sustaining injury by too great an exposure to high winds.

TO PRESERVE FLOWERS FRESH.

When flowers are withering in a flower pot, plunge about one third of the stem in boiling water, by the time the water is cold they will revive; then cut off the ends, and put them into cold water with a little nitre, when they will keep fresh for several days.

AQUATIC PLANTS,

as Villarsia, &c. generally do well in a mixture of peat and loam, and require to be kept constantly in a wet state; the pan or feeder should always be kept full of water. For these the double pots are very desirable.

TO PRESERVE CHOICE BULBS.

Cover them over in severe weather with old tan, or coal ashes. Bulbs should be dried in the shade.

Bulbs intended to FLOWER IN POTS, are best managed by being planted in the pot in the usual mixture, and at the common depth, the pots should then be buried a foot deep in the earth, either in a cold frame, or under some shelter. By thus burying the bulb, it forms healthy roots before the leaves are put forth, and in consequence becomes stronger and blows finer. When the leaves are grown two or three inches above the mould of the pot, the pots may be dug up, and by being put into the window of a warm room, or into a green-house, the plants will flower early and vigorously. The leaves when first taken out of the ground will be of a yellow colour from want of light, but exposure to this will soon restore them to their natural colour. Little water should be given to bulbs while thus buried, but when taken up and are beginning to flower, they may be watered plentifully.

SOIL PROPER FOR PINK PIPINGS.

Take one barrowful of rich light mould, add to it half the quantity of light loam and the same quantity of drift sand. When planting pipings, sprinkle them with water, about an hour afterwards place the hand-glass over them, which must remain on till they have struck, shading them from the mid-day sun. They should always be watered *over* the glass, so that the water may go entirely round it; when the sun is off, remove the mat that the plant may have plenty of light.

It has been proved beyond dispute, that *digging up the ground in the autumn*, and thereby subjecting it to the various atmospheric influences of the winter season, produces the most beneficial results, and is preferable to the application of manure on ground where only flowers are cultivated, as it ameliorates and renovates the soil, decomposes all noxious and extraneous substances, without imparting to it any of the rank qualities invariably produced by manure, which are generally inimical to the blossoming of plants.

PLANTS FROM NURSERIES.

It is most essential that on receiving plants from a nursery collection, judgment should be exercised with regard to the particular soil which each may require, and except in cases where the plants are very small, they will **INVARIABLY** require shifting into larger pots.

RANUNCULUSES

before planting should be laid on a damp flannel to swell; shake over the bulbs a little dry sand before covering with the mould.

Old Pink Roots are the best to save seed from.

ROSES AT CHRISTMAS.

To obtain which, select from your rose trees such buds as are just ready to blow; tie a piece of thread round the stalk of each, taking care not to touch the bud with your hand, or even the stalk more than you can avoid. Cut it carefully from the tree, with the stalk two or three inches in length. Melt some sealing wax and quickly apply it to the end of the stalk. The wax should only be sufficiently warm as to be ductile. Form pieces of paper into a cone-like shape, wherein place each rose separately, and screw it up carefully so as to *exclude the air*; they may then all be placed in a box or drawer which will keep them from the air. On Christmas day, or any other, take them out, cut off the ends of the stalks, and place them in a flower pot with *luke-warm water*; in two or three hours they will blow as in summer, *retaining all* their delightful fragrance.

In the choice of trees or shrubs always select young and healthy plants, except for particular purposes; the middle sized plants are much more likely to grow than the larger ones.

TRANSPLANTING

Flower roots in the summer season should be done in the cool of the evening, after which let them be watered.

CROWDING OF PLANTS.

Mr. PAXTON deprecates in strong terms the absurdity of expecting either healthy plants or brilliant coloured flowers from plants when crowded together, until they have become what is termed drawn, with scarcely any branches or foliage except a few twigs and sickly leaves near the top.

HOE AND SOW

in dry weather, and plant in wet, which will generally ensure success.

SHRUBS AND FLOWERS

should never be planted deep, or they will not thrive so well.

SEEDS

should also be sown shallow; and if small, very thin.

If OYSTER SHELLS are put round the pots in summer, they will not require so much water, and will keep the surface cool.

WATERING.

The plants (but especially tender ones) should not be watered when the sun is on them, as it often turns the leaves yellow and injures the plants.

Water should be given in the *Evening* from the *Middle of May till the beginning of September*, afterwards in the *Morning*, as frosts frequently begin about that time.

LIGHT

is the principal agent in the production and maturing of seeds.

For the tying of plants, *WORSTED* is preferable to *string*, not being so apt to cut the stems.

METALLIC WIRE

For securing Flowers, &c.

The advantage of the metallic wire is its durability and neatness, not being liable to decay; it requires no other care in fastening than that of being once or twice turned round with the fingers, and is so pliable, that it may be used with the greatest facility for all slender flower stems requiring support.

It may be obtained at most of the respectable Ironmongers at a very small charge.

MOSS ROPE FOR PLANTS IN BALCONIES,

(To preserve the plants from drought,)

may be made by tying moss round common wire to the thickness of $1\frac{1}{2}$ inch diameter, and when placed round the surface of the pot, preserves the roots from the intense heat of the sun.

N.B. Where the aspect is South, this will be found of most essential service in keeping the plants cool: plunging the rope every evening into a tub of water, and then replacing it, is beneficial.

IRON PLANT SUPPORTERS

The durability and neatness of which, for plants and flowers, have introduced them to our gardens, both for ornamental and also for useful purposes; they may be obtained of Messrs. Cottam and Hallen, and many other founders.

CANE will be found highly requisite in the garden, for ornamental and decorative purposes; its elasticity, its elegance of form, and its durability, at once recommend it to the amateur, for the facility and ease by which he is enabled to display ingenuity in the construction of trellises, &c. for the support of creeping plants.

The price of good sound cane is 4d. per lb. (this will answer all purposes,) bleached white cane, 10d. per lb., at Mr. Vandaville's, 101, Kent-street, Boro.

RATTAN CANES, from 2d. to 10d. per lb.; BAMBOO CANES for flowers, about 12 feet long, 33s., 50s., 75s., 100s., per 100 canes, at Mr. Crowder's, 13, Sun-street, Bishopsgate.

BAMBOO CANE COVERS,

For the Winter protection of tender plants, &c. out of doors.

They are formed in beautiful diamond net work, and are made two to three feet high, exceedingly light, and so pliable, as to be wrapped as a common net. They are very durable, and so extremely light, that a large size cover will not weigh more than two pounds. They may be had of any size of Mr. J. Kernan, 4, Great Russell-street, Covent-garden.

BLIGHT.

Whenever Roses or any other shrubs are infested with blights, take sulphur and tobacco dust, or Lundyfoot's snuff, in equal proportions, and strew it over the trees in the morning, when the dew is on; when the insects disappear, wash the tree with a decoction of Elder leaves.

ANTS.

To drive away Ants, use sulphur steeped in water; if in the gravel walks, strew them with salt and then water them. This will apply also to worms. Boiling water is also an efficacious remedy.

SNAILS.

Place tiles about the garden, in a hollow direction, under which they will get at night, and in the morning they may be easily destroyed.

CATERPILLARS

may be destroyed with tobacco water. Lime is also a good clearer of insects.

EARWIGS

may be taken, by placing bowls of tobacco pipes on the tops of flower sticks; in the morning you will find them in the bowls, turn them quickly into a basin of water, and replace the bowls as before.

For the *Convenience of Amateurs*, to some of the foregoing Garden Implements we have affixed the names and addresses of the Dealers; and have appended the following list of Manufacturers of Ornaments and Requisites for the Garden.

GARDEN ORNAMENTS

In Artificial Stone.

Vases, Tazzas, Fountains, Ornamental Fish Ponds, Flower Pots, Sun Dials, Figures from the Antique, Animals, Birds, &c. Grottoes, Artificial Rock Work, Cascades, &c.

Mr. Austin, New-road, Regent's Park, opposite Trinity Church
Sanders, 6, New-road, Regent's Park
Smith, Kings-road, Chelsea.

ORNAMENTAL VASES AND FLOWER POTS

In Terra Cotta.

Of various Classical shapes, embossed in imitation of Etruscan.

Mr. Purdon, King William-street, West Strand
Hancock, Ferdinand Cottage, Hampstead-road.

VASES in *Maltese Stone*—various classical shapes.

Messrs. Loft and Co., Dean-street, Soho
M. Carotti, Lisle-street, Leicester-square.

MANUFACTURERS IN CHINA,

Of FLOWER VASES, ornamental or plain,—Pots, circular, square, octagon, or oblong for flower stands; mignonette boxes, fronted or cast square in the mould,—TILES, for fronting boxes,—BASKETS, either for the Room or suspension in the Greenhouse for creeping Plants, which can be made to any pattern or device given.

Messrs. Copeland and Garrett, Portugal-street, Lincoln's Inn, and Stoke, Staffordshire

Flight and Bar, Coventry-street, and Worcester
Chamberlayne, New Bond-street, and Worcester
Blore, New Bond-street, and Derby
Davenport, Fleet-street, and Longport, Staffordshire
Phillips, 358, Oxford street
Mortlock and Sturges, 250, Oxford-street.

The Prices for fronting Flower Boxes with porcelain, size 8 inches deep and 2 feet long, 12s; at Messrs. Copeland's, or at Mr. Feetham's, Clifford-street, Bond-street.

IRON FLOWER STANDS

With graduated shelves and porcelain frontages.

Mr. Butler, 4, Caroline-place, Edgware-road
Feetham, Clifford-street, Bond-street.

Octagon flower stands of wrought iron—price, including the fixing of the tiles, £17.

Iron tripod stands for vases in back gardens, 5s 6d each.

Pink octagon Vases, 18s each.—Pink square Vases, £2 5s each.

Brass frames, &c. for suspending porcelain Baskets for Creepers in a Conservatory, 14s each.

CAST IRON & WIRE BORDERS & FENCES

For Flower Beds, &c.

Messrs. May and Morritt, 66, Oxford-street
Cottam and Hallen, Winsley street, Oxford-street
Reeve, 8, New-road
West, 17, New-road
Cato, Holborn-hill
Carron Company, Thames-street.

The prepared metallic Labels for Plants for writing in pencil, from 2s 6d to 5s per 100, may be had at Messrs. May and Morritt's.

*Cast Iron Garden Seats, Iron Rod, and Wire Work,
Arches for Walks, &c. &c.*

Mr. Reeve, 8, New-road
West, 17, New-road
Davies, King's-road, Chelsea
Baker, Manor-house, Chelsea
Smith, King's-road, Chelsea.

Rustic Seats for Summer Houses, Arbours, &c.

Mr. Prior, the Shade, Kilburn.

Cast Iron Garden Bowers.

Carron Wharf, Thames-street.

Fancy Fountain Manufacturer.

Mr. Rowley, 19, Howland-street, Fitzroy-square.

Hydraulic Pumps in variety for watering gardens.

Mr. Reed, Regent Circus, Piccadilly
Messrs. S. and T. Hye, Borough-road, Southwark.

The various gardening implements may be obtained at most of the ironmongers.

*French wooden waterproof Shoes for gardening, and
woollen "Chaucons" to wear with them, (both water-
proof and warm.)*

Monsr. Mainon, 5, Bozier's-court, Oxford-street.

Wicker Work, Flower Stands, Green House Blinds, &c.

Mr. Gibson, 18, Bath-place, New-road.

Moveable Green Houses.

Mr. Baker, King's-road, Chelsea
Mrs. Butler, King's-road, Chelsea.

For heating GreenHouses, &c. with hot water pipes, &c.

Mr. Weeks, King's-road, Chelsea
Bailey, Holborn
Eckstein, Holborn
Messrs. May and Morritt, Oxford-street
Cottam and Hallen, Winsley-street, Oxford-street
Cooper and Hall, Drury-lane.

The above are also manufacturers of Arnott's stoves for the same purpose.

PRICES OF FLOWER POTS,

And the mode of distinguishing the sizes by the term "Casts."

Cast of Common Pots, for instance, No. 32 costs from 3s. to 3s 6d.
(i. e. 32 Pots of this size for 3s.) Ditto, No. 48, for 3s. Ditto, Nos.
60, 24, 16, 12, 8, 6, 4, 2; also Thumbs, 60, at 3s. each cast.

TREATISES AND PERIODICALS

which may be consulted with much advantage for further detailed information on Botany and the Flower Garden; and to some of which we are *greatly* indebted for many observations and extracts in this volume.

	<i>s</i>	<i>d</i>		<i>s</i>	<i>d</i>
Mackintosh's Flower			Willat's Florist ..	7	6
Garden	12	0	Wilmot on Annuals ..	8	0
Greenhouse ..	10	6	Loudon's Suburban Gar-		
Neill's Flower Garden ..	6	0	dener	20	0
The Sentiment of Flowers ..	6	0	Gardener's Manual ..	0	6
The Bouquet, or Ladies'			Book of Botany ..	7	6
Flower Garden ..	3	0			

The Gardener's Gazette Weekly Newspaper.

	<i>s</i>	<i>d</i>		<i>s</i>	<i>d</i>
Baxter's Flowering Plants	3	6	Mrs. Loudon's Ladies'		
Botanical Magazine ..	3	6	Botany	2	6
Register	3	6	Gardeners' Magazine ..	1	6
Botanist .. 1s 6d and	2	6	Mackintosh's Gardener, 2s,	2	6
Floral Cabinet	2	6	Magazine of Botany ..	2	6
Floricultural Cabinet ..	0	6	Mande's Bot. Garden, 1s 6d,	2	6
Magazine	0	6	Paxton's Mag. of Botany ..	2	6
Horticultural Journal ..	1	6	Sowerby's Botany ..	1	0
			Yarrell's British Birds, 2s 6d.		

(From the Gardener's Gazette of July 13, 1839.)

SOAP SUDS A SPECIFIC FOR NOURISHING FLOWERS.

In the "Dumfries Courier," a correspondent writes: "Recently I happened to gather a beautiful pansy, and when tired of admiring it, tossed the toy aside, which partly by accident fell into a box-full of soap suds. The said pansy had neither joint nor root, and you may judge of my surprise when at the end of a day or two I found it growing. From this time forward I watched it narrowly, and now find it, after the lapse of a fortnight, *a goodly plant with several buds on it*. Thinking water might produce the same effect, I placed a newly cropped pansy in an element, which, pure in itself, is the medium of purity in everything else; but it withered and died on so spare a diet. By way of confirming the first experiment, I have since placed a slip of rose tree and a pink in suds, and both are flourishing in great vigour in my dressing-room. Should this accidental discovery prove useful to Florists, it will afford sincere pleasure to your Correspondent."

If this statement is correct, might it not be advantageously applied to cut flowers in rooms, when placed in porcelain or opaque vases?

PRESERVATION OF PLANTS AND CUTTINGS WITHOUT THE AID OF A FRAME.

Most Shrubby plants will live during the winter, if buried entirely in the earth. Cuttings of Roses, Lilacs, Periwinkle, and other woody shrubs may be saved by this means. If air can but get to plants, the constant warmth and moisture at some distance below the surface of the earth, are favorable to vegetation; the privation of light only causes the shoots to be blanched and look sickly or *drawn*, but on exposure to the sun, they recover their wonted hue.

In ANY Corner of the Garden, or under any Trees or Plants, the common ARUM will *grow well*, and with its rich red fruit will greatly add to the autumnal beauty.

THE LARGE SCARLET GERANIUM,

ON THE GROWTH AND MANAGEMENT OF,

Kindly communicated by Mr. SPRIGNALL, Gardener at Taplow House, Bucks.

In May they should be taken from the pots and planted out in a mixture of light sandy loam, where they may remain till the first week in October; at which period they must be repotted and placed in a cold green-house of low temperature for protection from the frost. About the second week in February remove the plants from the green-house into a coach-house or closed shed with a door, which will *harden them*, make them grow "short jointed," cause them to open their leaves freely, and thereby produce an abundant floration. There are four varieties of this plant:—1. The Waterloo,—2. Brighton Hero,—3. Bath Scarlet,—4. Smith's Seedling. These magnificent plants, exhibiting a blaze of scarlet flowers from the base to the summit, sometimes attain to the height of 10 feet, with a circumference near the turf of 16 feet.

Mr. Little, of King's-road, Chelsea, has a large stock of these plants, varying in height from 5 to 6 feet, at from 10s. to 3*l.* each.

PLANTS FOR ROCK WORK.

Yellow Alyssum,—Cistus,—Houseleek (*Sempervivum tectorum*;) propagated by suckers.—Lichnidea (*Phlox divaricata*); Blue Crane's Bill, propagated by cuttings or layers.—London-pride (*Saxifraga umbrosa*); part the roots in spring or autumn.—Snapdragon (*Antirrhinum majus*); propagated by seed.—Soap-wort (*Saponaria ochymoides*); propagated by slips or cuttings.—Toad-flax (*Linaria cymbalaria*)—creeping plant; propagated by parting the roots; it spreads fast.—*Zinnia multiflora*, A; sow the seeds in April.—Periwinkle (*Vinca Minor*),—Stone-crop (*Sedum acre*); from cottage roofs and walls.—Saxifrages,—(*Nolana prostrata*).—Money-wort (*Lysimachia nummularia*). A native plant found in moist meadows.

All these plants are best planted among the stones, by slips, or cuttings, or roots; care must be taken that there is plenty of earth filled into the crevices, and that this is not washed away from the roots by watering or rain before the plants have struck.

AQUATIC PLANTS.

The genera which chiefly claim admission into the Aquarium on account of the beauty of their flowers, are the *Nymphæa*, *Limncharis*, *Meneanthus*, *Nelumbium*, *Aponogetum*, *Euryale*, the *Cyperus papyrus*, and the rice plant *Oryza sativa*. Most aquatic plants may be propagated by seed, which should be sown in the water as soon as they are ripe, when they will vegetate and grow without much further trouble.

THE AVIARY.

The first object in an Aviary should be to keep out the mice; and effectually to attain this end, the wire-work should not only be close, but should be carried all round the enclosure, *underneath* as well as above, unless the bottom be of marble. Pope has recorded his opinion, that Scagliola is effective,

"And your d—d Stucco has no chinks;"

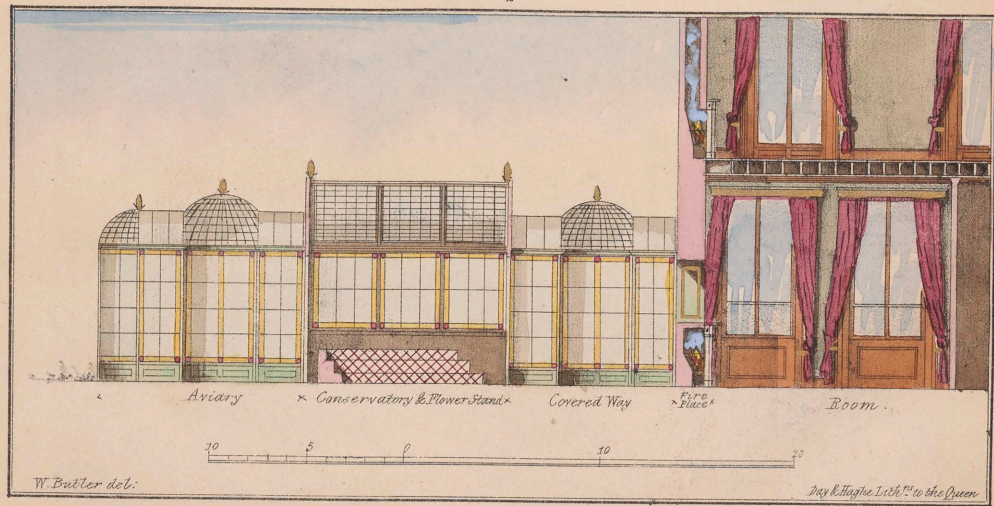
but perhaps the wire-work is the most secure.

To whatever number of male birds in an aviary, there should always be an equal proportion of females. The breeding and feeding cages, with baths and troughs for drinking, should always be outside, and out of sight, in a back cupboard of communication, with a small pigeon hole and a trap-door to slide up and down, lifted or lowered by means of a string, affording ingress and egress for the birds. By shutting this door at night, the birds will in the morning immediately the trap-door is opened, promptly resort to the feeding cage for their food, and the slide being then closed, they can be kept there, while the servant deliberately cleans out the aviary. This precaution will prevent the frightening of the birds—a practice so very injurious to their plumage.

The Sylvia tribe, of which there are fifteen varieties in this country, (all songsters,) may be kept with other British birds; but there must be a feeding cage *expressly for them*, with German paste, meal worms, and other varieties of food fit for *soft billed birds*. The meal worms may be kept in a small flat double wedged shaped box, with a glass aperture in the centre, like a beetle trap. With the facilities of cleaning the interior of the aviary, by the means mentioned, there can be no objection to the back being composed of one entire plate of looking-glass; by which the effect will be greatly enhanced.

Design for a Morning or Breakfast Room, with an attached Green-house or Aviary.

In giving this sketch it is intended to offer a suggestion for the improvement of *any morning room with a South aspect*, and the fire-place either at the East or West end of the apartment.—1st. By substituting an "Arnot's stove" (cased in elegant porcelain slabs) for the usual grate.—2nd. the square space of the fire-place being likewise lined with ornamental porcelain tiles.—3rd. the mantel-piece to be as low as possible, so as to enable any one while sitting before the fire or at the table, to see into the green-house through the upsliding plate glass window which closes the aperture through which the conservatory is visible over the mantel-piece.—4th. at night a sliding *looking-glass* may be let down, to give the room its usual appearance when candles are brought; by this means the amateur will be enabled to contemplate his



SUGGESTION FOR A MORNING OR BREAKFAST ROOM, WITH AN ATTACHED CONSERVATORY AND AVIARY, visible through an upsliding window of plate-glass over the mantel-piece (which must be very low), with an Arnott's stove covered with porcelain, and the flue leading up on one side.

flowers daily, and to shut them out or exclude them from sight whenever he is disposed so to do. The flue or iron tube for the smoke, must of course be led up on one side, as the glazed window will occupy the place where the chimney was before. The door of entrance to the interior of the conservatory will of course be from the garden, and so will be the entrance to the glazed cupboard outside the aviary, and in which the breeding cages, feeding cages, and Bath cages are kept. A stove-heated house for Epiphytes may, by being thus attached, be made constantly visible and enjoyable to the more scientific amateur; or an hot-house for a miscellaneous collection of tropical plants. If Epiphytes (from *ἐπι ἐπὶ* upon, *φυτον φυτόν* a plant) were preferred, then they might be suspended from the roof in elegant ornamental porcelain baskets.

THE GENUS SYLVIA.

The British species belonging to this interesting genus are chiefly birds of passage, visiting this country in spring, and leaving it again in autumn; several of these are deservedly esteemed as the finest songsters of all the feathered race; the Nightingale, in particular, has the sweetest and most pleasing note of any bird at present known. It has been generally supposed that they are very difficult to preserve in confinement; but Mr. Sweet, in his "British Warblers," states that he succeeded well in keeping several of the most interesting species through several winters in perfect health, and many of them are in full song all the winter; and he has not the least doubt but that *all the species might be kept through the inclement season with a little care and attention.*

During the winter, they should be kept in a warm room, or in any part of a hot-house; when the weather is mild, a little fresh air should be admitted; they may either be preserved in cages, separately; or several together in a small aviary, where all the species might be intermixed. The temperature of the room where they are, ought never to be much below temperate, though some of the kinds do not mind a slight frost. The species that I have found suffer most from cold, are, *S. Rubetra*, *S. Phoenicurus*, and *S. hortensis*; the Nightingale (*S. Luscinia*) is not near so tender as these; *S. cinerea*, *S. Sylviella*, and *S. atricapilla*, scarcely seem to mind the cold at all.

In a wild state, the species of this genus feed almost entirely on insects and fruit, but in confinement they may be taught to feed on several other things; the *more insects they have given them the better*; and it is believed to be impossible to keep them in perfect health without a frequent supply. The food which agrees with them best for a constancy, is, an equal proportion of bruised hemp-seed and bread, mixed up in the following manner: first put some hemp-seed in a little pan, and pour some boiling water on it; then, with a stick flattened at the end, bruise it as fine as possible, and add the same quantity of soft bread, which must also be bruised up with it, so that the oily milk from the seeds may be mixed with the bread, till it is of the consistence of a moist paste:

of this mixture they are all very fond; but it should be mixed up *fresh every day* particularly in summer, or the stale food will injure their health, and make them dislike it altogether. Also give them a little boiled milk and bread for a change, and some fresh raw meat cut in small pieces; some of the species like the fat best, but the greater part prefer the lean. In winter, when insects are scarce, occasionally treat them to the yolk of an egg, boiled hard, and then crumbled small; this partly answers the purpose; but it is a good plan to have a *stock of insects in store*, to supply them with a few every day, which keeps them in good health, and makes them sing more melodiously.

A supply of some sorts of insects is easily preserved for the winter. The large species of *flies* may be caught in great abundance in autumn; particularly the *Musca tenax*, which at that season, are very plentiful on the *dahlias*, *French* and *African marigolds*, and other plants belonging to the *compositæ*. *Musca vomitaria* is also plentiful on the *Ivy*, when it is in flower; of those two species large quantities may be caught, and dried for the winter; they only require to be put loosely in a paper bag, and to be hung up in a dry room, so that they do not get mouldy; when they are given to the birds, a little boiling water must be poured on them, which softens them; and the birds are as fond of them as if they were alive.

Some fine gravel must also be kept continually in their cages; as the birds of this genus eat a great deal of it, and will not continue in good health without a constant supply. They are also very fond of frequent washing, so that a pan of water, or something large enough for them to get into, should be kept constantly at the bottom of their cage.

These birds, when in confinement, are very restless at the seasons of their usual migration from one country to another; at the time they are leaving this country in autumn, about twice during the winter, and again when they are returning in spring. From their agitation at various times in winter, it may be concluded, that they visit more than one country, after their departure from this; it is very curious to see them when in that state, their restlessness seems to come on them all at once, and generally, in the evening, when they are setting seemingly quite composed, they start up suddenly and flutter their wings, sometimes flying direct to the top of the cage, or aviary, at other times, running backwards and forwards on their perches, continually flapping their wings, and looking upwards all the time; nor will they notice any thing that is going forward, as long as they continue in that state, which lasts for an hour or two at each time. By their always wishing to fly upwards, it may be supposed, that when they first take their flight, they mount direct upwards to a great height, so that they can direct their course the better, by seeing the way clear all around them: their agitation generally lasts on them about a fortnight, more or less; in the spring it seems strongest on them; for at that season, they will sometimes flutter about the whole of the night, and sleep a great part of the day.

Sweet (in his *British Warblers*) is the only author who mentions that the birds of this genus moult or change their feathers more or less, *twice in the year*, in the summer or autumn before they take

their departure from this country, and again at the latter end of winter, or before their arrival in spring; this appears to be a provision of nature, that their feathers may be fresh and strong, to assist them in their flight from one country to another; it is seldom found that they suffer any inconvenience from moulting, as birds in general are supposed to do; the only thing to guard against, is, to be careful that they do not get chilled with cold, and to keep them rather warmer at that time than usual; nothing is of more real benefit to them, than to place them *out in the sun as often as possible*, which brings out their feathers very quickly.

These birds are sometimes troubled with warts, or swellings on their feet, particularly in cold weather, which make them lame, and sometimes it irritates them so much, (probably from its itching,) that I have known them pull off their claws; but this is easily remedied, for when they are first observed to be lair if a little fresh butter be rubbed on their feet, or, what is much better, a small quantity of Price and Gosnell's Cold Cream; even if their feet are swelled very much, and full of knots or warts, immediate relief will be afforded, and a perfect cure in a very short time. If by accident they happen to break off a claw or toe, it is best to soak it directly in Freeman's Bathing Spirits, which stops the blood immediately, and soon heals the wound.

Their general food, which is bruised hemp-seed and bread, is apt to become dry on a summer's day, particularly if the cages are placed out of doors; it should be moistened, or the birds will not eat it, as they always prefer it very moist; it had better be a little over-moist than too dry. They are fondest of their meat, when mixed up with the bruised hemp-seed and bread, which should be cut up in small pieces, not scraped with a knife as is generally done; a little very fresh they sometimes prefer. An occasional change of food is of the greatest importance, both as to keeping them in good health, and raising their spirits to make them sing. Mr. Sweet states that "nearly the whole of my birds have been in *full song all the winter*; the greater part began to sing in October, and the others in November."

Bird-fanciers generally keep their nightingales, or other birds that they consider tender, in a close cage, with wires only in front, thinking it will keep them warm, and preserve their health; on the same principle, Mr. S. states, "I had my largest cage made, only with green baize at the top, to keep them from injuring their heads when on their passage; at the same time I had a less cage, wired all round except on one side, and I was surprized to find that the birds were always more healthy in that, than in the close one, where some of them were frequently ill; and I generally found that when removed into the open cage, they soon recovered: I therefore had the close one altered last spring, with wires at both ends and front, and a close back, that there might be a free circulation of air, which I supposed the birds wanted, and *since that time they have all been in excellent health*; I had observed before that, that the nightingales always sung better in an open cage, than in a close one."

We have said that a pan of water should be kept continually in the cage, that the birds may wash whenever they chose; this is the case with the greater part of *the old birds*, but it is very hurtful to young ones, as it is apt to give them the *cramp*, and

weaken them. The Wood-wren, Grasshopper warbler, 'Sedge' warbler, and Reed warbler, are so fond of washing, that if the water is left continually in their cage, it will very much weaken them, and frequently cause their death. It is, therefore, best to give these birds water in something that they cannot wash in, allowing them to wash about *once a week in the winter*, and that always in the morning of a fine day; they will then be able to clean and dry themselves in good time.

THE CANARY FINCH.

The genus *Fringilla* (Linnæus) or Finch, embraces not only the most beautiful, but also the most agreeable of the feathered tribe. Of these the most remarkable and melodious is the Canary Finch, (*Fringilla Canaria*, Linn.) consisting of two varieties; one having the bill and body straw colour, and quill and tail feathers greenish; the other with body above brown, and eyebrows yellow. The prevailing colour of this bird is, however, yellow, mixed with grey; but in a state of nature it is chiefly grey. Other varieties, or rather sub-varieties, have been described to the number of thirty, arising, doubtless, from domestication, and admixture with other Finches. It is about the size of a goldfinch.

In Germany and the Tyrol, whence the rest of Europe is principally supplied, the apparatus for breeding Canaries is both large and expensive. A large building is erected for them, with a square space at each end, and holes communicating with these spaces. In these outlets are planted such trees as the birds prefer: the bottom is strewed with sand and gravel, on which are thrown hemp-seed, rape-seed, chickweed, groundsel, &c., and such other food as the birds like. Throughout the inner compartment, which is kept dark, are placed brooms and young fir-trees, for the birds to build in, care being taken that the breeding birds are guarded from the intrusion of the rest. Four Tyrolese usually take over to England about sixteen hundred of these birds; although they carry them on their backs nearly 1000 miles, and pay £20 for them originally, they sell them at 5s. each.

The Canary Finch is not so delicate as it is sometimes thought to be. Much depends on its rearing and bringing up; as good air and situation, with cleanliness, and when young, a daily supply of fresh food until it becomes master over the seed. Good air and a proper situation to breed in, are *essentially necessary* for the canary finch; and in proportion to the healthiness of the place will the young birds thrive, grow strong and healthy, and be enabled to stand most situations, without fear or danger.

Of all the various species of foreign singing birds, none has appeared so hardy, healthy, and tractable as the canary finch; nor in breeding has produced such variety as this beautiful bird. Most foreign birds degenerate and loose their spirits; but the canary finch rises in colour, feather, and song; and if properly managed, no bird will so well recompense the trouble of rearing. First, he will delight us with a song nearly all the year round, if bred and reared for that purpose. Secondly, with beauty, colour, softness, and regularity of feather. Thirdly, a fine, clean, stately appearance. (The canary finch is never fat if in health, for his constant singing and activity keep him thin.) Lastly, for his union in breeding with other hard-billed finches, thereby producing harmony, strength, and beauty.

There are two distinct and separate species of singing birds; one hard-billed, the other soft-billed, which will never unite together; the one always living upon hard dry seed, the other on flesh, soft food, and insects. Who could cross the nightingale with the canary? To many, it may not be amiss to give a catalogue of the most admired and favourite singing birds that are hard-billed, and soft-billed. First, Hard-billed: the canary, aberdevine, goldfinch, chaffinch, greenfinch, bullfinch, linnet, hedge-sparrow, yellow-hammer, and twite. Soft-billed: nightingale, sky-lark, wood-lark, tit-lark, robin, red-start, wren, black-cap, and starling. On the subject of pairing for mule-breeding, and getting canary mothers to hatch and rear up various other finches' eggs, it is necessary that you be certain of their feeding and training, as much depends on your knowledge and age of those you cross-breed from. In cross-breeding, beauty, strength, and song, will be far different; for which ever is cock is most predominant. Sometimes the first season of pairing mules will not answer, when the second will succeed. It should however be remembered, that mules, as a goldfinch and canary, canary and linnet, &c., will not breed; they are barren; although in that excellent work, the Animal Kingdom, from the French of Cuvier, 7th volume, article, Mule Birds, "it is pretended that bastard birds which come from the mixture of canaries, with the siskins or aberdevine, goldfinches, &c., are not sterile mules, but fertile mongrels, which can unite and produce not only with their paternal and maternal races, but also with each other, and give birth to fruitful individuals, the varieties of which may also mingle and be perpetuated. Springer assures us, after many observations, of the truth of this assertion. It is also the opinion of Hervieux, who states that he has seen the father, the mother, and the young of the second race; and he tells us that nature never produced any thing so fine in this kind. It would appear that this production, if real, depends on many circumstances which it is impossible to ascertain, and still more so to point out precisely."

Mr. Yarrell has very kindly favored us with the following list of

FOREIGN BIRDS,

with their English names appended.

1	Guarica cardinalis	17	
2	Loxia melanocephala. Lin.	18	
3	Fringilla canaria	19	Loxia astrilda
4		20	Fringilla serinus
5	Emberiza Paradisia. Lin.	21	Fringilla, Senegala
6	Loxia dominicana	22	Loxia punctalaria. Lin.
7	Loxia oryzivora	23	
8		24	Loxia Madagascariensis. L.
9	Fringilla amadava		{ Mocking bird
10	Loxia, Malacca. Lin.		{ Turdus polyglottis
11	Pipilo erythrophthalma	40	Linota cannabina
12	Loxia oryx. Lin.	41	Coccothraustes chloris
13	Silvia, Wilsonii	42	Emberiza citrinella
14	Loxia ludoviciana. Lin.	43	Loxia curvirostra
15		44	Accentor modularis
16	Loxia cœrulea. Lin.	45	Linota linaria

- | | |
|------------------------------------|--------------------------------|
| 46 <i>Fringilla cœlebes</i> | 55 <i>Alauda arborea</i> |
| 47 <i>Emberiza miliaria</i> | 56 <i>Anthus arboreus</i> |
| 48 <i>Coccothraustes vulgaris</i> | 57 <i>Carduelis spinus</i> |
| 49 <i>Erythaca rubecula</i> | 58 <i>Linota montium</i> |
| 50 <i>Pyrrhula vulgaris</i> | 59 <i>Pyrgita montana</i> |
| 51 <i>Carduelis elegans</i> | 60 <i>Emberiza schoeniclus</i> |
| 52 <i>Fringilla montifringilla</i> | 61 <i>Alauda arvensis</i> |
| 53 <i>Emberiza hortulana</i> | 62 <i>Anthus pratensis</i> |
| 54 <i>Pyrrhula enucleator</i> | 63 <i>Emberiza cirius</i> |

The English names of the above small birds for Aviaries.

- | | |
|------------------------|-----------------------|
| 1 Red crested cardinal | 6 Red headed cardinal |
| 2 Black headed ditto | 7 Java sparrow |
| 3 Canary finch | 8 African ditto |
| 4 Weaver bird | 9 Amadavade finch |
| 5 Whida bird | 10 Malacca gross beak |

Foreign Birds, the possession of which is a desideratum.

- | | |
|-------------------------|-------------------------|
| 11 Towhee bunting | 18 Silver bills |
| 12 Grenadier gross beak | 19 Wax bills |
| 13 Blue ditto | 20 Sevin finches |
| 14 Red breasted ditto | 21 Senegal finches |
| 15 Fire birds | 22 Nutmegs |
| 16 Blue birds | 23 Cut throat |
| 17 Nonpareil finches | 24 Madagascar grossbeak |

There are several other small birds that might be had at bird shops that would agree with the above.

SMALL BRITISH BIRDS

in the Aviary of the Zoological Gardens, Regent's Park.

- | | |
|------------------|-------------------|
| 40 Common linnet | 45 Lesser redpole |
| 41 Green finch | 46 Chaffinch |
| 42 Yellow hammer | 47 Common bunting |
| 43 Cross bill | 48 Hawfinch |
| 44 Hedge sparrow | 49 Redbreast |

BRITISH BIRDS

not in the Aviary, that would agree with the above, and might be easily obtained.

- | | |
|--------------------|--------------------|
| 50 Bullfinch | 57 Siskin |
| 51 Goldfinch | 58 Mountain linnet |
| 52 Bramblefinch | 59 Tree sparrow |
| 53 Ortolan bunting | 60 Reed bunting |
| 54 Pine bullfinch | 61 Sky lark |
| 55 Wood lark | 62 Tit lark |
| 56 Pipet lark | 63 Cirl bunting |

Mr. Turner, the Dealer in Hanway-street, Oxford-street, has favored us with the following list of

NORTH AMERICAN BIRDS,
with reference to *Wilson's American Ornithology*,

		Vol.	Plate.
Meadow lark	<i>Alauda magna</i> ..	3	19
Shore lark	<i>Alauda alpestris</i> ..	1	5
Towhee bunting	<i>Emberiza erythrophalma</i> ..	2	10
Nonpareil	<i>Emberiza ciris</i> ..	3	24
White crowned bunting	<i>Emberiza leuophrays</i> ..	4	31
Black throat bunting	<i>Emberiza Americana</i> ..	1	3
Rice bunting	<i>Emberiza oryzivora</i> ..	2	12
Cow bunting	<i>Emberiza pecoris</i> ..	1	18
Purple finch	<i>Fringilla purpurea</i> ..	5	42
White throat sparrow	<i>Fringilla albicollis</i> ..	3	22
Fox-coloured sparrow	<i>Fringilla rufa</i> ..	3	22
Lesser redpole	<i>Fringilla linaria</i> ..	4	30
Yellow bird	<i>Fringilla fristis</i> ..	1	20
Indigo bird	<i>Fringilla cyanea</i> ..	1	6
Blue gross beak	<i>Loxia cerulea</i> ..	3	24
Cardinal gross beak	<i>Loxia cardinalis</i> ..	2	11
Pine gross beak	<i>Loxia enucleator</i> ..	1	5
Rose breast gross beak	<i>Loxia rosea</i> ..	2	17
Red start	<i>Muscipata ruticilla</i> ..	5	45
Baltimore oriole	<i>Oriolus Baltisnorus</i> ..	1	1
Orchard oriole	<i>Oriolus mutatus</i> ..	1	4
Blue mountain warbler	<i>Sylvia montana</i> ..	5	44
Hemlock warbler	<i>Sylvia parus</i> ..	5	44
Yellow rump	<i>Sylvia coronata</i> ..	5	45
Red wing starling	<i>Sternus predatories</i> ..	4	30
Louisiana tanager	<i>Tanagra Ludoviciana</i> ..	3	20
Red tanager	<i>Tanagra rubra</i> ..	2	11
Mocking bird	<i>Turdus polyglottis</i> ..	2	10
Red breasted thrush	<i>Turdus migratorius</i> ..	1	2
Wood thrush	<i>Turdus melodist</i> ..	1	2
Hermit thrush	<i>Turdus solitarius</i> ..	5	43

EAST INDIAN BIRDS.

Nutmeg	Nonpareil
White headed minecan	Wax bills
Black ditto ditto	Red gross beaks
Sineman	Averdavatts
Java sparrows	St. Helena canary

AFRICAN BIRDS.

Mozambique finches	Button
Bishop, black, red, and yellow	Weaver
Quaker	Camarasoo
Cut throat	Love
Widah finch	Mocking
Fire	Nonpareil
Blue	Waxbill

AMERICAN BIRDS.

Cardinal bird Virginia Nightingale Blue bird
N.B. The whole of the above feed upon canary any millet seeds.

LIST OF FOREIGN BIRDS

For Aviaries.

Mr. Freestone has favoured us with the following list, and prices, (of whom they may be procured.)

Senegal Sparrows, per pair.....	£1	0	0
They will breed about Christmas in cage, the same as Canaries.			
Nonpareils, from America, each ..	1	10	0
Or, if very good	2	0	0

Their food is the best millet and canary seed, with, as often as you can, a spider; they are much better than meal-worms. The summer Blue Birds change their plumage every half-year, from blue to brown; they require the same seed as the Nonpareil, and are also songsters.

The Widah bird, from the province of Widah in Africa, is a very beautiful bird when in full plumage, the tail frequently measuring 12 inches long; it retains its beauty one half the year, during the other half it assumes a brown colour; its food is millet and canary seed, with a little crumbled bun, sponge cake, or hard boiled chopped eggs, with a little raw seed, two or three times a week; the price is about 2*l*.

The Cambosa is also a small bird, very much resembling the Widah, changing its colour every six months, one half the year being brown, the other half, dark blue or raven black; the general price is 1*l* 10*s*.

Silver Beak, or Quaker, a small bird, sings very well, pr.	1	0	0	canary seed, African.
The Nutmeg, from India, pr. ..	1	0	0	ditto
The White Headed Mannican ..	1	0	0	ditto
Java Sparrow, pr.	0	10	0	ditto
Black Headed Mannican, pr. ..	1	10	0	ditto
Brown Mannican, pr.	1	10	0	ditto
Wax Bill, from St. Helena, pr. 1	10	0	ditto	
Brazilian Finch	1	0	0	ditto

The Senegal Blue is a very pretty bird, with a small red stripe on each side of the bill, the same as the Wax-bill, its food is millet seed; price—2*l*. The small African wax-bills are different from the St. Helena, being smaller and plain brown only, with a red stripe on each side of the bill; price—2*l*. The bishop changes every half-year, sometimes black and scarlet, the other half brown; there are some of the same species, orange and black. The Madagascar gross beak is very much like the bishop in appearance out of colour, but rather larger; when in full colour, the Madagascar has scarlet on the top of the head, and the bishop black; price—2*l*. The bishop out of colour, 1*l*.; in colour, 2*l*.

*Dealers in British and Foreign Birds, for Aviaires, &c.
also Wire Workers and Cage Makers.*

Mr. Freestone, 42, St. Martin's-lane
Ashton, Oxford-street
Andrews, 17, Old Compton-street, Soho
Wyatt, 192, Oxford-street
Bain, 18, Upper York-street, Bryanstone-square
Turner, 11, Hanway-street, Oxford-street
Hartnall, 2, Edward-street, Wardour-street, Soho
Turpie, 11, High-street, Bloomsbury.

*Manufacturers of Aviaries for Green Houses and
Pleasure Grounds.*

Mr. Cripps, King's-road, Chelsea
Messrs. Wyatt, 192, Oxford-street.

Gold and Silver Fish

Form an interesting and elegant appendage to a Pleasure Garden or Conservatory: they may be kept either in ornamental ponds, in tasteful marble basons, or glass globes; care should be taken to place a few birch twigs on the side most exposed to the sun, so as to afford protection and shelter to the young ones. Although warmth seems congenial to the nature and increase of these beautiful but delicate fish, yet instances have been known of their not only remaining in a stone cistern through an intensely cold winter, when the small quantity of water, and the exposed situation, rendered it difficult to believe that any part of the water remained in a liquid state; but in about three months after were found in perfect health.

They belong to the Carp tribe, and form the species *Cyprinus Auratus* of Linnæus, being known also under the name of the Golden Carp, or Dorade of China, where they are found in the rivers and fresh lakes. Their singularly splendid colour, resides in the membrane immediately beneath the scales, which are subject to singular variations. According to Cuvier, there are three varieties of gold and silver fish; namely, those which are at first blackish, but assume by degrees the golden colour, then the silver fish, and lastly those marked by various shades of black, gold, and silver. According to the same author, the accidental changes in the fins and eyes of these fish, arise from the circumstance of their domestication and artificial condition of living. They are chiefly brought to this country from Portugal. Bread crumbs should be sparingly given to them, as it turns the water sour; they will feed on the aquatic plant Lemna, or duck's meat, and also on the small fry of other fish. Hawkins says they should be fed on bread and gentles, with fine gravel sprinkled at the bottom of the globes, changing the water frequently. Others recommend a few millet seeds every three or four days; but the degree of feeding seems to depend on the kind of water supplied, whether hard, or impregnated with vegetable matter, or animalculæ, and also on the frequency of changing it.

In the Spring, if small faggot shaped bundles of twigs of willow, about 8 inches long, be placed in the water, their tendency to vegetate produces an adhesive filmy mucilage, very favourable to the protection and the eventual maturing of the spawn.

ON KEEPING GOLD AND SILVER FISH.

From the Domestic Magazine we have extracted the following article:

"Having for three or four years preserved several fish that were presented to us, a few practical hints to those who may be in possession of those foreign beauties, and unskilled in their management, may perhaps be acceptable. The largest globe that London could furnish was provided. New River water, to the extent of three gallons, was given every day; and as the globe was emptied and replenished by means of a syphon, the fish were not disturbed. It is usual to catch the little delicate creatures, either with the hand, or in a net, in order to remove them, while the water is being changed; but this method, however tenderly managed, terrifies, and sometimes injures them. A frequent cause of their death, is injudicious food, and too much of it: bread kills them, and biscuit is scarcely to be trusted, because the materials of which it is composed are not always pure. Foreign vermicelli, in minute portions, given at intervals of two or three days, is the very best aliment.

Water contains so much nourishment, that if it be changed every day, little food need be given in addition.

The most proper situation for a globe of fish is near a window (which in fine weather should be open), but not in the *direct rays of the sun*, because the spherical figure of the water, caused by the glass, may tend to form a burning lens. *The centre of a green basket flower stand, with Exotic Plants on each side, is a most elegant arrangement*; at the bottom of the globe two or three shells, and a piece of red coral, may be introduced with admirable effect; they offer a double advantage, for they conceal any unsightliness caused by sediment in the water, &c. I have seen moss introduced, but as it is not an aquatic plant, it might prove distasteful, if not inimical to the fish. When the globe requires to be cleaned, which may be about once a week, it will be requisite to employ a net, in order to remove the fish; this may be made of gauze, attached to a long piece of whalebone, bent round at the end, to form the receptacle, into which *one fish at a time*, should be introduced, and lifted gently from the globe into a large bowl."

Dealers in Gold and Silver Fish.

Mr. Andrews, 17, Old Compton-street, Soho
Hartnall, 2, Edward-street, Wardour-street, Soho
Brown, 27, New Church-street, Paddington
Solomons, Covent-garden
Wyatt, 192, Oxford-street
Grimley and Co. Covent-garden.

Price of Gold and Silver Fish, English, which are most esteemed for the richness of their colour, 5s. per brace, or 5*l.*, 6*l.*, and 7*l.* per 100, according to the size. The Foreign are cheaper, but not so good.

LIST OF GERMAN AND OTHER SEEDS, WITH PRICES,

From a List just Published by

MR. J. CARTER, SEEDSMAN, 238, HIGH HOLBORN.

NECESSARY EXPLANATIONS RESPECTING

The Linnæan Classes and Orders, Natural Orders, Duration, Height, Colour of the Flower, Time of Flowering, &c., in Eight Columns.
See Miscellaneous Flower Seeds, No. 34.

1st and 2nd Columns.—The Linnæan Classes and Orders.

3rd Column.—Natural Orders.

4th Column.—*Hardiness and Duration of each plant.*

h. hardy; hh. half-hardy; t. tender; f. frame; bs. or ds. bark or dry stove; a. annual (last 1 year); b. biennial (last 2 years); p. perennial (last many years).—Application: ha. hardy annual; hha. half-hardy annual; ta. tender annual; fa. frame annual; bsa. bark stove annual; hb. hardy biennial; hhb. half-hardy biennial, &c. &c.; hp. hardy perennial, &c. &c. Seeds of greenhouse and stove plants sometimes lie long before they vegetate.

5th Column.—*Colour; bl. blue, &c.*

6th Column.—*Usual height of the plant in feet.*

7th Column.—*Usual month of flowering; 6 June; 6-9 June to September, &c. &c.*

8th Column.—*Price per Packet. 6d. Packets may be had of those marked 3d. and 4d.*

THE ACCENTS.

à, è, (i, y,) ò, and ù are long, as in Acà-cia, Gardè-nia, Lupi-nus, Collò-mia, Cùphea.

á, é (i, y,) and ó are short, as in Itál-ica, él-egans. bíc-olor, Nemóph-ila.

* Dwarf Plants proper for the edgings of beds.

** Ornamental Climbers for Walls, Arches, Bowers, Verandas, &c.

† Biennials, &c. that usually flower the first year.

The dots | .. | .. | .. | indicate a repetition.

I. *The 24 Linnæan Classes.* (See Miscellaneous Flower Seeds, 1st Column.)

The Linnæan Classes are founded on the Sexual Organs.

a. <i>Stamens (male organs) equal.</i>		c. <i>Stamens united in sets.</i>	
Classes.	Stamens.	Classes.	
No. 1. Monan'dria . . .	1	No. 16. Monadelphia, 1 set.	
2. Diandria . . .	2	17. Diadelphia, 2 sets.	
3. Triandria . . .	3	18. Polyadelphia, many sets.	
4. Tetrandria . . .	4	d. <i>Compound Flowers (Asters, &c.)</i>	
5. Pentandria . . .	5	19. Syngenesia.	
6. Hexandria . . .	6	e. <i>Stamens on the style.</i>	
7. Heptandria . . .	7	20. Gynandria.	
8. Octandria . . .	8	f. <i>Male and female separated.</i>	
9. Enneandria . . .	9	21. Monœ'cia, on one plant.	
10. Decandria . . .	10	22. Dioœ'cia, on different plants.	
11. Dodecandria 12 to 19 S.		g. <i>Male, female, and hermaphro-</i>	
in the cup.		<i>dite flowers, on one or different</i>	
12. Icosandria 20 or more S.		<i>plants.</i>	
on the base.		23. Polygamia, many mar-	
13. Polyandria, many stamens.		<i>riages.</i>	
b. <i>Stamens unequal.</i>		h. <i>Flowers wanting or incomplete.</i>	
14. Didynâmia, 2 long, 2 short.		24. Cryptogamia, hidden mar-	
15. Tetradyndâmia 4 „ 2 „		<i>riages.</i>	
		<i>Ferns, Mosses, &c.</i>	

TIME OF SOWING.—Hardy Annuals, February till June. Hardy Biennials and Perennials, April till June, and in Autumn. Half-hardy Annuals, &c., in March, under hand-glasses or on a moderate hot-bed. Many of the Biennials and Perennials marked hh will stand the winter without protection; they, as well as the half-hardy Annuals, with few exceptions, may likewise be sown on a warm border early in May. The tender Annuals require more than one hot-bed. Frame and Greenhouse plants may be sown from January till September.

N.B. The Numbers 1 to 24 represent the 24 Linnæan Classes (see Column 1st, page 139, whereas those indicating the Linnæan Orders (2nd Column), and the Natural Orders (3rd Column), are arbitrary; their signification is given above.

Example. Aster | 19 | 54 | 83 | belongs to the 19th Linnæan Class (*Syngenesia*), and to the Linnæan Order *Polygamia superflua*. The Natural Order is *Compositæ*, comprising many splendid ornaments of the Flower Garden, as Asters, Dahlias, Coreopsis, Marigold, Zinnias, &c.

MISCELLANEOUS FLOWER SEEDS.

In giving orders for any of the following Flower Seeds, it is sufficient to mention the number, with or without the name; each packet being furnished with both, and also the scientific name, if required.

No.		Linnean Class.	Linnean Order.	Natural Order.	Hardiness and Duration of the Plant.	Colour of the Flower.	Height in Feet.	Month of Flowering.	Price per Packet.
34	Aster, quilled German, mixed	19	54	83	hha	div.	2	8-10	s. d. 4
35	do. large packet	..	..	..	..	..	..	..	1 0
36	quilled ash-grey	..	..	..	..	a. g.	..	..	4
37	— bordered	..	..	..	..	bor.	..	..	4
38	— light blue	..	..	..	..	l. b.	..	..	4
39	— dark blue	..	..	..	..	d. b.	..	..	4
40	— dark red	..	..	..	..	d. r.	..	..	4
41	— pink	..	..	..	..	pk.	..	..	4
42	— purple	..	..	..	..	pur.	..	..	4
43	— rose	..	..	..	..	rose	..	..	4
44	— striped	..	..	..	..	str.	..	..	4
45	— white	..	..	..	..	wh.	..	..	4
46	— violet	..	..	..	..	vio.	..	..	4
47	Anemone-flowered	..	..	..	..	div.	..	..	6
48	superb, new globe	..	..	..	..	c. w.	..	..	6
49	variegated, globe	..	..	..	..	var.	..	..	6
50	pyramidal, mixed	..	..	..	..	div.	..	..	6
51	Turkey red	..	..	..	..	cr.	..	..	6
52	Chinese	..	..	..	..	div.	..	..	3
53	early dwarf, mixed	..	..	..	..	..	1	7-9	4
54	Auricula, extra fine	5	25	121	hhp	..	½	4-5	2 6
55	fine border*	..	..	..	hp	..	..	1	0
56	Balsam, extra fine double	..	..	70	ta	..	2½	7-9	6
57	double purple	..	..	..	..	pur.	..	..	4
58	Camellia-flowered	..	..	..	..	var.	..	..	6
59	rose-coloured	..	..	..	..	rose	..	..	4
60	scarlet	..	..	..	..	sc.	..	..	4
61	striped, fine new	..	..	..	..	str.	..	..	6
62	white	..	..	..	..	wh.	..	..	4
63	dwarf scarlet*	..	..	..	..	sc.	1	..	4
64	superb new dotted	..	..	..	..	spot.	2½	..	6
65	No. 56 to 64 incl., 9 var.	..	..	..	..	div.	..	3	0
66	Candytuft, crimson*	15	60	86	ha	cr.	1	6-5	6
67	two-coloured*	..	..	..	..	bic.	..	..	6
68	Normandy*	..	..	..	..	pur.	..	..	3
69	purple*	..	..	..	..	..	..	..	3
70	crown-flowered*	..	..	..	..	wh.	..	..	4

No.	Lin. Cl.	Lin. Ord.	Nat. Ord.	Hard. and Dur. of Pl.	Col. of Fl.	Ht. in Ft.	M. of Fl.	Pr. per P.
71	..	..	..	..	..	..	..	s. d.
72	..	..	..	..	fl.	..	..	3
73	..	..	..	..	..	..	..	6
74	..	..	..	..	div.	..	..	2 6
75	5 25	77	hp	pur.	3	6-9	..	3
76	..	..	..	wh.	..	..	..	3
77	..	..	..	b. l.	..	..	1 0	..
78	..	131	ta	div.	2	..	2 6	..
79	..	..	..	..	..	..	6	..
80	10 26	79	hp	..	..	..	3	..
81	..	..	hhp	..	..	..	1 0	..
82	..	..	..	..	..	..	2 6	..
83	..	..	hp	..	..	..	1 0	..
84	..	..	hbp	..	..	..	2 6	..
85	19 53	83	ha	or.	3	6-8	..	3
86	10 28	79	..	r. w.	1	..	..	3
87	..	..	..	div.	..	..	1 6	..
88	5 25	63	ta	cr.	1	7-9	..	6
89	..	..	..	yel.	1 1/2	..	6	..
90	..	..	..	red	..	..	6	..
91	..	..	..	div.	..	..	2 0	..
92	..	..	..	..	..	..	6	..
93	13 30	122	hp	..	2	5-7	..	3
94	19 54	83	ha	yel.	3	6-9	..	3
95	..	..	..	wh.	..	..	3	..
96	..	..	..	3 col.	1	..	3	..
97	..	..	..	yel.	..	..	3	..
98	..	..	..	..	..	..	6	..
99	..	..	..	div.	div.	..	1 3	..
100	2 25	101	..	r. p.	1 1/2	6-7	..	6
101	5 ..	85	..	3 col.	tra.	6-9	..	3
102	..	..	..	wh.	..	..	6	..
103	..	..	..	bl.	..	..	3	..
104	..	..	..	var.	..	..	3	..
105	..	..	..	div.	..	..	1 0	..
106	..	..	hha	..	10	..	3	..
107	..	..	..	d. v.	..	..	3	..
108	..	..	..	rose	..	..	3	..
109	..	..	..	sp.	..	..	3	..
110	..	..	..	str.	..	..	3	..
111	..	..	..	vio.	..	..	3	..
112	5 25	85	hha	wh.	10	6-9	..	3
113	..	..	..	div.	..	..	1 0	..
114	19 55	83	..	y. r.	2	6-9	..	3
115	..	..	..	r. y.	..	..	6	..
116	..	..	..	r. y.	..	..	6	..

No.	Lin. Cl.	Lin. Ord.	Nat. Ord.	Hard. and Dur. of Pl.	Col. of Fl.	Ht. in Ft.	M. of Fl.	Pr. per P.
117	Coreopsis, new semi-double	..	..	..	y. r.	..	..	s. d. 6
118	Drummond's, fine	..	..	..	y. d.	..	..	6
119	Atkinson's	..	..	..	y.	..	..	3
120	No. 114 to 119 inclusive	..	..	..	div.	..	2	0
121	Cowslip, 2 varieties	5 25	121	hp	y. s.	2 ½	5-6	6
122	Cyanus, fine mixed	19 55	83	ha	div.	2 ½	6-9	3
123	Egg Plant, purple	..	131	ta	pur.	..	6-8	4
124	white	..	..	..	wh.	..	..	4
125	Dahlia, fine double†	19 54	83	hhp	div.	3	8&c.	6
126	extra fine do.†	..	..	..	..	..	1	0
127	Foxglove, purple	14 59	128	hp	pur.	2 ½	6-9	3
128	white	..	..	..	wh.	..	..	3
129	yellow	..	..	..	yel.	..	..	4
130	iron-coloured	..	..	..	gr.	..	..	3
131	woolly	..	..	..	yel.	..	..	6
132	No. 127 to 131 inclusive	..	..	..	div.	..	1	0
133	Flos Adonis	13 35	1	ha	sc.	1	7-8	3
134	Fraxinella, red	10 25	128	hp	red	3	5-7	3
135	white	..	..	..	wh.	..	..	3
136	French Honeysuckle†	17 45	102	hhp	red	4	6-7	3
137	white†	..	..	..	wh.	..	..	3
138	Globe Amaranthus	5 25	63	ta	pur.	2	7-9	4
139	rose-coloured	..	..	..	rose	..	..	4
140	striped	..	..	..	str.	..	..	4
141	white	..	..	..	wh.	..	..	4
142	No. 138 to 141 inclusive	..	..	..	div.	..	1	3
143	Gourds, fine mixed	21 49	87	hha	..	tr.	..	3
144	Spanish Bottle	..	..	..	wh.	..	..	6
145	Hercules' club	..	..	..	..	..	..	6
146	orange	..	..	..	yel.	..	..	3
147	striped pear	..	..	..	..	..	..	3
148	Mammoth	..	..	..	..	..	..	6
149	10 finest varieties	..	..	..	w. y.	..	3	0
150	Hawkweed, purple	19 53	83	ha	pur.	1	6-8	3
151	new white	..	..	..	wh.	..	..	4
152	yellow	..	..	..	yel.	..	..	3
153	silvery	..	..	..	sil.	..	..	3
154	No. 150 to 153 inclusive	..	..	..	div.	..	1	0
155	Heartsease, extra fine	5 25	136	hp†	..	1	4-9	1
156	Hollyhock, finest mixed	16 48	107	hp	..	7	7-9	6
157	Chinese, mixed	..	..	..	v. c.	3	6-8	4
158	Horn Poppy, 3 varieties, sep.	13 25	114	ha	div.	2	7-9	9
159	Ice Plant	12 27	93	ta	wh.	tr.	5-8	4
160	Jacobæa, new dark purple	19 54	83	hha	d. p.	1 ½	7-9	6
161	double purple	..	..	..	p.	..	..	4
162	double white	..	..	..	wh.	..	..	4
163	No. 160 to 162 inclusive	..	..	..	div.	..	1	0

No.		Lin. Cl.	Lin. Ord.	Nat. Ord.	Hard. and Dur. of Pl.	Col. of Fl.	Ht. in Ft.	M. of Fl.	Pr. per P.
164	Larkspur, finest dwarf*	13	28	123	ha	..	1	6-8	s. d. 3
165	double dwarf blue*	..	..	..	..	bl.	..	..	3
166	— dark red*	..	..	..	..	d. r.	..	..	3
167	— rose*	..	..	..	..	rose	..	..	3
168	— white*	..	..	..	..	wh.	..	..	3
169	— slate*	..	..	..	..	sl.	..	..	3
170	— light blue*	..	..	..	..	l. b.	..	..	3
171	— flesh-coloured	..	..	..	..	fl.	..	..	3
172	— unique*	..	..	..	..	2 col.	..	..	3
173	No. 164 to 172 inclusive	..	..	..	..	div.	..	1	6
174	8 other varieties*	..	..	..	..	..	..	1	6
175	Larkspur, fine tall, mixed	..	..	..	..	..	1½	..	3
176	double tall blue	..	..	..	..	bl.	..	..	3
177	— rose	..	..	..	..	rose	..	..	3
178	— white	..	..	..	..	wh.	..	..	3
179	— slate	..	..	..	..	sl.	..	..	3
180	branching, mixed	..	..	..	..	div.	..	..	3
181	— double rose	..	..	..	..	rose	..	..	3
182	— double purple	..	..	..	..	pur.	..	..	3
183	No. 175 to 182 inclusive	..	..	..	..	div.	..	1	6
184	Lavatera, red	16	48	107	..	red	3	7-9	3
185	white	..	..	..	..	wh.	..	..	3
186	Love lies bleeding	21	40	63	..	red	..	..	3
187	white or buff	..	..	..	..	pale	..	..	3
188	Lupines, large blue	16	45	102	..	bl.	3	..	3
189	Dutch blue	16	45	102	ha	bl.	2	7-9	3
190	large rose	..	..	..	..	rose	3	..	3
191	small blue	..	..	..	..	bl.	2	..	3
192	straw-coloured	..	..	..	..	st.	..	..	3
193	white	..	..	..	..	wh.	..	..	3
194	yellow	..	..	..	..	yel.	..	..	3
195	dwarf (nanus)	..	..	..	..	p. b.	1	..	4
196	Cruikshank's	..	..	..	..	var.	3	..	3
197	variable	..	..	..	..	var.	..	..	3
198	No. 188 to 197 inclusive	..	..	..	..	div.	..	2	0
199	Lychnis, scarlet	10	30	79	hp	sc.	2	..	3
200	white	..	..	..	..	wh.	..	..	3
201	Corsican	..	..	..	hb†	red.	½	6-7	4
202	coeli rosa	..	..	..	ha	rose	1	7-8	3
203	No. 199 to 202 inclusive	..	..	..	..	div.	div.	1	0
204	Mallow, 6 varieties	16	48	107	..	..	..	7-8	6
205	Marigold, French, fine mixed	19	54	83	hha	..	1½	7-9	3
206	fine dwarf	..	..	..	..	d. br.	1	..	3
207	fine tall	..	..	..	..	var.	1½	..	3
208	splendid striped	..	..	..	..	str.	..	..	6
209	Unique	..	..	..	..	..	..	..	3
210	African, mixed	..	..	..	..	div.	2	..	3

		Lin. Cl.	Lin. Ord.	Nat. Ord.	Hard. and Dur. of Pl.	Col. of Fl.	Ht. in Ft.	M. of Fl.	Pr. per P.
211	Marigold, new dwarf	..	..	..	..	or.	1	..	s. d. 3
212	lemon	..	..	..	..	yel.	2	..	3
213	orange	..	..	..	..	or.	..	..	3
214	No. 205 to 213 inclusive	..	..	..	..	..	..	..	2 0
215	Marvel of Peru, mixed†	5	25	110	hnp	div.	3	6-9	3
216	red	..	..	..	..	red	..	..	3
217	red-striped	..	..	..	..	str.	..	..	3
218	yellow	..	..	..	..	yel.	..	..	3
219	yellow-striped	..	..	..	..	str.	..	..	3
220	white	..	..	..	..	wh.	..	..	3
221	hybrid	..	..	..	..	red	..	..	6
222	scarlet	..	..	..	..	sc.	..	..	6
223	three-coloured	..	..	..	..	var.	..	..	4
224	No. 216 to 223 inclusive	..	..	..	..	..	..	2	0
225	Mignonette, per oz. 8d.	11	23	124	ha	yel.	1½	..	3
226	Nasturtions, dwarf	8	25	133	..	or.	1	..	3
227	new dwarf	..	..	..	..	s. o.	..	..	4
228	tall	..	..	..	..	o. y.	6	..	3
229	dark red	..	..	..	..	red	..	..	3
230	spotted	..	..	..	..	sp.	..	..	6
231	new carmine, 3 seeds	..	..	..	..	car.	..	..	6
232	No. 226 to 231 inclusive	..	..	..	..	..	..	1	9
233	Palma Christi, tall	21	49	92	hha	gr.	6	7-9	3
234	Pea, Lord Anson's	17	45	102	ha	bl.	..	6-8	3
235	Tangier	..	..	..	..	sc.	4	..	3
236	— new striped	..	..	..	..	str.	..	..	4
237	winged	..	..	..	..	yel.	1	..	3
238	— scarlet	..	..	..	..	sc.	..	..	3
239	Crown Topknot	..	..	..	..	rose	4	..	3
240	No. 234 to 239 inclusive	..	..	..	..	..	..	1	6
241	sweet, mixed	..	..	..	..	div.	4	6-8	3
242	black	..	..	..	..	bl.	..	..	3
243	painted Lady	..	..	..	..	var.	..	..	3
244	purple	..	..	..	..	pur.	..	..	3
245	scarlet	..	..	..	..	sc.	..	..	3
246	striped	..	..	..	..	str.	..	..	3
247	yellow	..	..	..	..	yel.	..	..	3
248	white	..	..	..	..	wh.	..	..	3
249	No. 242 to 248 inclusive	..	..	..	..	..	..	1	0
250	Pink, true mountain*	10	26	79	hp†	wh.	1	7-9	6
251	beautiful*	..	..	..	..	div.	¾	..	6
252	common*	..	..	..	hp	w. p.	1	6-8	3
253	fine double do.*	..	..	..	..	..	..	1	0
254	Indian*	..	..	..	hb†	div.	¾	7-9	3
255	fine double Indian*	..	..	..	..	..	..	..	4
256	double white do.*	..	..	..	..	wh.	..	..	4
257	Spanish*	..	..	..	..	d. r.	..	..	3

No.	Lin. Cl.	Lin. Ord.	Nat. Ord.	Hard. and Dur. of Pl.	Col. of Fl.	Ht. in Ft.	M. of Fl.	Pr. per P.
258	Pink, dark-red*	..	..	..	..	..	..	s. d. 6
259	broad-leaved*	..	..	..	pk.	..	..	3
260	No. 250 to 259 inclusive	..	..	..	..	..	..	3 0
261	Polyanthus, fine mixed*	5 25	121	..	div.	$\frac{1}{2}$	3-5	6
262	extra fine*	..	..	..	..	..	..	1 0
263	Poppy, fine mixed	13 25	114	ha	..	2	7-9	3
264	black	..	..	..	bl.	..	..	3
265	carnation	..	..	..	var.	..	..	3
266	dark red	..	..	..	d. r.	..	..	3
267	scarlet	13 25	114	ha	sc.	2	7-9	3
268	dwarf Turkey	..	..	..	s. w.	1	..	4
269	Marseilles	..	..	..	str.	2	..	4
270	dwarf Ranunculus	..	..	..	div.	1	..	3
271	12 varieties, separate	..	..	..	div.	div.	2	6
272	Princes Feather	21 40	63	..	pur.	3	..	3
273	Sweet Rocket	15 61	86	hp	wh.	1	5-8	3
274	Scabious, sweet, mixed	4 25	89	hpt	div.	2	7-9	3
275	large-flowered	..	..	..	..	..	..	6
276	white	..	..	..	wh.	..	..	3
277	rose	..	..	..	rose	..	..	3
278	striped	..	..	..	str.	..	..	4
279	dwarf*	..	..	ha	div.	1	..	3
280	No. 274 to 279 inclusive	..	..	..	..	..	..	1 6
281	Sensitive Plant	23 51	102	tp	red	$1\frac{1}{2}$	5-9	4
282	Snake Melon	21 49	87	ta	yel.	tr.	7-9	4
283	Snap Dragon, fine mixed	14 59	129	hpt	div.	2	5-9	3
284	6 varieties, separate	..	..	div.	..	div.	1	6
285	Stock, Ten-week, fine mixed	15 61	86	hha	..	$1\frac{1}{4}$	6-9	3
286	scarlet	..	..	..	sc.	..	..	3
287	purple	..	..	..	pur.	..	..	3
288	white	..	..	..	wh.	..	..	3
289	German, fine dwarf*	..	..	..	div.	1	..	6
290	— large packet*	..	..	..	..	..	1	0
291	— blue	..	..	..	bl.	..	..	6
292	— dark blue	..	..	..	d. b.	..	..	6
293	— brown, 3 varieties	..	..	..	br.	..	1	0
294	— chestnut	..	..	..	ch.	..	..	6
295	— copper	..	..	..	cop.	..	..	6
296	— dark grey	..	..	..	gr.	..	..	6
297	— flesh-coloured	..	..	..	fl.	..	..	6
298	— fine red	..	..	..	red.	..	..	6
299	— mulberry	..	..	..	mul.	..	..	6
300	— peach-blossoms	..	..	..	p. b.	..	..	6
301	— purple	..	..	..	pur.	..	..	6
302	— rose	..	..	..	rose	..	..	6
303	— white	..	..	..	wh.	..	..	6
304	— new yellow Chameleon	..	..	..	yel.	..	..	6

PLANTS NOT HAVING POPULAR NAMES.

The following Plants, with few exceptions, and these, if necessary, are indicated, have no popular name; thus *Adenóphora stylósa* is rendered long-styled *Adenóphora*, &c.

A— indicates a variety. A () indicates that the word is not a literal translation, or that it is superadded.

No.		Lin. Cl.	Lin. Ord.	Nat. Ord.	Hard. and Dur. of Pl.	Col. of Fl.	Ht. in Ft.	M. of Fl.	Pt. per P.	s.d.
341	<i>Adenóphora stylósa</i>	5 25	77	hpt	p. b.	1½	5-6	6		
342	<i>Adlúmia cirrhósa</i> **	17 41	94	hpt	w. p.	15	6-9	6		
343	<i>Agerátum mexicànum</i>	19 53	83	hha	bl.	1½	..	3		
344	odorátum	.. ..	..	..	..	..	..	6		
345	<i>Alonsósa grandiflóra</i>	14 59	129	hhpt	sc.	1	..	6		
346	<i>Alstroeméria</i> , pl. sp.	6 25	138	ghp	div.	div.	div.	1 0		
347	<i>Amaranthus bicolor</i>	21 40	63	ta	var.	1½	7-9	4		
348	tricolor	.. ..	..	..	..	1½	..	4		
349	<i>Amethystea cœrúlea</i>	2 25	101	ha	bl.	2	..	3		
350	<i>Anagallis carnea</i> *	5 25	121	..	fl.	1	..	3		
351	indica*	.. ..	..	..	bl.	..	..	3		
352	latifolia*	.. ..	..	..	pur.	..	..	4		
353	grandiflora	.. ..	..	fp	..	..	..	6		
354	Monelli	.. ..	..	..	bl.	..	..	6		
355	Philipsi	.. ..	..	..	..	..	..	6		
356	<i>Anchúsa itálica</i>	.. ..	74	hhbt	r.p.	2	6-9	4		
357	incarnata	.. ..	..	hhpt	fl.	1½	..	4		
358	<i>Anemone coronária</i>	13 35	123	..	div.	1	5-6	6		
359	<i>Pulsatilla</i>	.. ..	..	hp	vio.	½	..	6		
360	<i>Anomathëca cruenta</i>	3 25	145	fp	red	1	5-9	6		
361	<i>Anóda hastáta</i>	16 48	107	hb+	bl.	1½	6-7	4		
362	<i>Dilleniana</i>	.. ..	..	ha	..	1½	6-9	4		
363	<i>Aquilègia canadensis</i>	13 30	123	hp	r.o.	2	5-7	6		
364	formosa	.. ..	..	..	..	..	..	6		
365	— ròsea	.. ..	..	..	rose	..	..	6		
366	glandulosa	.. ..	..	..	w. b.	..	..	6		
367	sibírica	.. ..	..	..	b.w.	..	..	4		
368	<i>Arctótis tristis</i>	19 56	83	ha	..	..	7-9	3		
369	<i>Argemone grandiflora</i>	13 25	114	hhp	wh.	..	7-8	6		
370	mexicana	.. ..	..	ha	yel.	..	..	3		
371	— alba	.. ..	..	..	wh.	..	..	3		
372	ochroleuca	.. ..	..	..	yel.	..	..	4		
373	speciosa	.. ..	..	..	..	..	..	6		
374	<i>Arnopogon capensis</i>	19 53	83	hhb	..	1	..	6		
375	<i>Asclépias nívea</i>	5 26	68	hhp	wh.	3	7-9	6		
376	curassavica	.. ..	..	bsp	sc.	..	6-9	6		
377	incarnata	.. ..	..	hp	fl.	2	7-8	3		
378	pulchra	.. ..	..	..	pur.	..	..	6		
379	<i>Asphodèlus fistulósus</i>	6 25	138	..	wh.	1½	6-9	6		
380	<i>Aster tenellus</i>	19 54	83	hha	bl.	¾	7-8	3		

No.		Lin. Cl.	Lin. Ord.	Nat. Ord.	Hard. and Dur. of Pl.	Col. of Fl.	Ht. in Ft.	M. of Fl.	Pr. per P.	s. d.
381	Astrágalus, 3 species	3 sp. (mixed)	17	45	102	h	div.	div.		6
382	Baptisia australis	southern	10	25	..	hp	bl.	2½	7-8	4
383	Bartonia aurea	golden	13	..	105	ha	yel.	2	7-9	6
384	Basella lucida	shining	5	98	..	ghb	red	1	8-9	4
385	Blumenbachia insignis	beautiful	18	48	105	ha	wh.	tr.	7-9	6
386	Browallia elata	tall (purple)	14	59	129	fa	bl.	1½	6-9	4
387	— alba	— white	..	..	..	..	wh.	..	..	4
388	Buphthalmum uniflorum	single flowered	19	54	83	..	..	..	..	6
389	Cacalia coccinea	scarlet	..	53	..	hha	sc.	½	7-9	4
390	Calandrinia discolor	two-coloured	11	25	120	hbb+	var.	1	6-8	4
391	grandiflora	large-flowered	..	..	..	..	red	1½	..	6
392	pilosiuscula	hairy	..	..	..	..	..	..	..	4
393	ciliata	ciliated	..	..	..	..	..	½	..	3
394	speciosa	showy	..	..	..	..	..	1	..	4
395	— — —	No. 390 to 394	..	..	..	..	..	..	..	1
396	Calceolaria punctata	spotted	2	..	129	fp	sp.	1½	6-9	6
397	tricolor	three-coloured	..	..	..	..	var.	..	..	6
398	— — —	finest shrubby	..	..	..	..	div.	div.	1	0
399	Calendula hybrida	hybrid	19	56	83	ha	wh.	1	7-9	3
400	officinalis	official	..	..	..	..	or.	2	..	3
401	— picta	— painted	..	..	..	..	var.	..	..	6
402	pluvialis	(Cape)	..	..	..	..	wh.	1	..	3
403	stellata	starry	..	..	..	..	or.	2	..	3
404	— — —	No. 399 to 403	..	..	..	..	..	..	..	1
	Calliopsis or Coreopsis, v.	No. 114 to 119	..	..	..	..	..	..	..	3
405	Calystegia marginata	bordered	5	25	85	hhp	pink	3	..	6
406	Campánula carpatia	Carpathian	..	..	77	hp	bl.	½	6-9	4
407	glomerata	clustered	..	..	..	..	vio.	2	5-9	6
408	grandiflora	large-flowered	..	..	..	..	bl.	1½	..	6
409	latifolia, 3 species	broad-leaved	..	..	..	..	div.	3	7-9	4
410	persicifolia	peach-leaved	..	..	..	..	bl.	..	..	3
411	pyramidalis	pyramidal	..	..	..	hhp	..	4	..	4
412	— alba	— white	..	..	..	..	wh.	..	..	4
413	sibirica	Siberian	..	..	..	hb	bl.	1	..	6
414	Lorei	Lore's	..	..	..	ha	..	1½	7-8	6
415	— alba	— white	..	..	..	..	wh.	..	..	6
416	pentagonia	five-angled	..	..	..	..	pur.	1	..	3
417	— alba	— white (new)	..	..	..	..	..	..	..	4
418	Canna pl. sp.	sev. (fine) sp.	1	..	141	fp	div.	2½	6-9	6
419	Carthamus oxyacanthus	sharp-spined	19	53	83	ha	yel.	3	7-9	6
420	Catananche coerulea	blue-flowered	..	..	..	hbt	bl.	2	6-9	3
421	bicolor	two-coloured	..	..	..	..	var.	..	..	6
422	lutea	yellow	..	..	..	ha	yel.	¾	..	3
423	Celsia orientalis	oriental	14	59	131	..	..	2	7-8	3
424	Centaurea Behen	Behen	19	55	83	..	..	..	..	4
425	americana	American	..	..	..	hha	red	..	8-9	6
426	depressa	dwarf	..	..	..	..	var.	1	..	6

No.		Lin.	Cl.	Lin.	Ord.	Nat. Ord.	Hard. and Dur. of Pl.	Col. of Fl.	Ht. in Ft.	M. of Fl.	Fr. per P.
427	<i>Centaurea macrocéphala</i>	long-headed	...	...	...	...	ha	yel.	3	7-9	s.d. 4
428	<i>Cerastium</i> pl. sp.	sev. (<i>fine</i>) sp.	10	30	79	...	...	div.	...	6-8	6
429	<i>Cheiranthus alpinus</i>	alpine	15	61	86	hb†	...	yel.	1	5-7	4
430	<i>Chryseis californica</i>	Californian	13	29	114	hp†	...	...	2	6-8	3
431	<i>crœcea</i>	orange-col.	...	...	...	...	...	or.	...	...	3
432	— <i>compacta</i>	compact	...	...	...	...	...	1*	...	...	3
433	<i>Cineraria sibirica</i>	Siberian	19	54	83	...	...	yel.	4	...	6
434	<i>speciosa</i>	showy	...	...	...	...	...	6	...	...	6
435	var. <i>nova</i>	var. of <i>King</i> , &c.	...	...	...	fp	div.	...	...	1	0
436	<i>Cistus</i> , pl. var.	sev. (<i>fine</i>) sp.	13	25	80	hp†	...	div.	...	...	6
437	<i>Clarkia gauroides</i>	<i>Gaura</i> -like	8	...	111	ha	lil.	2	7-8	...	3
438	<i>élegans</i>	elegant	...	...	...	...	...	...	...	...	3
439	— <i>rosea</i>	— <i>rose-col.</i>	...	...	...	...	rose	...	...	...	3
440	<i>pulchella</i> *	pretty	...	...	...	...	red	1½	...	...	3
441	— <i>alba</i> *	— <i>white</i>	...	...	...	...	wh.	...	...	...	4
442	— <i>limbriata</i> *	— <i>fringed</i>	...	...	...	...	red	...	...	...	4
443	— <i>alba</i> *	— <i>white</i>	...	...	...	...	wh.	...	...	...	4
444	— <i>grandiflora</i> *	large-flowered	...	...	...	...	red	...	...	...	4
445	— — —	No. 437 to 444	...	...	...	...	...	...	...	2	0
446	<i>Clématis</i> sp. <i>austrâlis</i>	Australian	13	35	123	ghp	cl.	...	...	1	0
447	<i>Cleome pentaphylla</i>	<i>five-leaved</i>	15	61	78	ta	rose	1½	7-8	...	4
448	<i>spinosa</i>	spinous	...	...	...	...	wh.	...	...	...	6
449	<i>Clintonia elegans</i>	elegant	16	40	103	hha	bl.	1½	7-9	...	4
450	<i>pulchella</i>	beautiful	...	...	...	...	var.	1	...	1	0
451	<i>Cobæa scandens</i> **	climbing	5	25	81	ghp	pur.	30	...	...	6
452	<i>Collinsia bicolor</i>	two-coloured	14	59	129	ha	var.	1½	...	...	4
453	<i>grandiflora</i>	large-flowered	...	...	...	...	p. b.	1	...	...	3
454	<i>verna</i>	vernal	...	...	...	...	...	...	...	...	3
455	<i>Collomia coccinea</i>	scarlet	5	25	117	...	sc.	...	...	...	3
456	<i>grandiflora</i>	large-flowered	...	...	...	...	...	...	...	...	3
457	— — —	No. 452 to 456	...	...	...	...	...	...	...	1	3
458	<i>Commelina cœlestis</i>	sky-blue	3	25	142	hhp†	bl.	1½	6-8	...	6
459	<i>Corydalis glauca</i>	glaucous	17	41	94	ha	y. p.	2	7-9	...	3
460	<i>Cosmea bipinnata</i>	bipinnate	19	55	83	hha	pur.	...	...	...	6
461	<i>sulphurea</i>	sulphur-col.	...	...	...	...	yel.	...	...	...	6
462	<i>Côtula aurea</i> *	golden	...	54	...	ha	...	½	...	...	3
463	<i>Cicernus Châte</i>	(<i>hair</i>)	21	49	87	hha	...	tra.	7-8	...	4
464	<i>dipsacoides</i>	teasel	...	...	...	...	...	...	...	...	4
465	<i>flexuosus</i>	flexuous	...	...	...	...	...	...	...	...	6
466	<i>prophetarum</i>	prophets'	...	...	...	...	...	...	...	...	6
467	— — —	No. 463 to 466	...	...	...	...	...	...	...	1	6
468	<i>Câphea silenoides</i>	<i>Silene</i> -like	11	25	106	ha	pur.	1	7-9	...	6
469	<i>Dahlia purpurea</i> , vera	(<i>real Mexican</i>)	19	54	83	hhp†	...	2	...	...	6
470	<i>Dátura ceratocaulon</i>	horn-stalked	5	25	131	hha	st.	3	...	...	4
471	<i>fastuosa</i>	proud (<i>showy</i>)	ta	pur.	2	4
472	— <i>alba</i>	— <i>white</i>	wh.	4
473	<i>guayaquilensis</i>	<i>Guayaquil</i>	ha	4

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474	Datura quercifolia	<i>oak-leaved</i>	<i>s.d.</i>	3
475	Delphinium azureum	<i>azure Larkspur</i>	13	28	123	hp†	bl.	6	..	4
476	elegans, pictum	<i>painted</i>	..	..	..	..	var.	2	..	6
477	elatum	<i>(Bee)</i>	..	..	..	..	bl.	6	..	3
478	glaucum	<i>glaucous</i>	..	..	..	..	..	3	..	4
479	grandiflorum	<i>large-flowered</i>	..	..	..	..	bl.	2	..	4
480	album	<i>— white</i>	..	..	..	..	wh.	..	..	6
481	flore-pleno	<i>— double</i>	..	..	..	..	b.w.	..	1	0
482	mesoleucum	<i>white-eyed</i>	..	..	..	..	bl.	..	..	6
483	sibiricum	<i>Siberian</i>	..	..	..	..	..	7-9	..	4
484	speciosum	<i>showy</i>	..	..	..	..	bl.	4	..	4
485	sinense	<i>Chinese</i>	13	28	123	hp†	l. b.	2	7-9	3
486	— pl. var.	<i>— sev. (fine) v.</i>	..	..	..	..	div.	..	..	6
487	urceolatum	<i>urceolate</i>	..	..	..	..	bl.	..	..	4
488	— — —	<i>No. 475 to 488</i>	..	..	..	..	div.	..	3	4
489	Dianthus cæsius	<i>blue grey</i>	10	26	79	hp†	fl.	½	6-7	4
490	Carthusianorum	<i>Carthusians'</i>	..	..	..	..	red	1½	7-8	4
491	superbus	<i>superb</i>	..	..	..	..	wh.	..	..	4
492	Dolichos capensis**	<i>Cape</i>	17	45	102	ghp	yel.	6	..	6
493	lignosus**	<i>woody</i>	..	..	..	..	pur.	12	..	6
494	sesquipedalis	<i>18 inch (pod.)</i>	..	..	..	..	wh.	6	..	6
495	sp. maximus	<i>large species</i>	..	..	..	..	..	..	..	6
496	Dracocéph. argunense	<i>Argun</i>	14	58	101	hp	bl.	1½	..	6
497	denticulatum	<i>denticulated</i>	..	..	..	..	str.	2	..	4
498	canariense	<i>(Balm of Gil.)</i>	..	..	..	hhp	var.	2½	..	4
499	Eccremocarpus scaber**	<i>rough-(pod.)</i>	..	59	72	..	or.	7	..	4
500	longiflorus	<i>long-flowered</i>	..	..	..	..	..	..	..	6
501	Echium Lœrei	<i>Lœre's</i>	5	25	74	ha	d. b.	2½	..	3
502	violaceum	<i>violet</i>	..	..	..	hp†	vio.	..	..	3
503	Drœsera sp. capensis	<i>Cape sp.</i>	..	30	..	hhp	wh.	½	..	6
504	Eremurus tauricus	<i>Taurian</i>	6	25	140	..	..	2	6-8	1
505	Erodium gruinum	<i>crane</i>	16	42	96	ha	pur.	½	..	3
	Eschscholzia, see Chrys.									
506	Eutocha multiflora	<i>many-flowered</i>	5	25	100	hhb†	sl.	1½	..	3
507	viscida	<i>viscid</i>	..	..	..	..	s.bl.	..	..	4
508	Wrangeliâna	<i>Wrangel's</i>	..	..	..	..	p.bl.	1	..	4
509	Fœdia cornucopiæ	<i>Horn of Plenty</i>	2	26	..	ha	red	..	..	4
510	Fumaria spicata	<i>spiked</i>	17	41	94	..	fl.	6	7-8	4
511	Galaria aristata	<i>awned</i>	19	55	83	hhp	yel.	2	7-9	4
512	bicolor	<i>two-coloured</i>	..	..	..	..	or.	..	..	4
513	picta	<i>painted</i>	..	..	..	..	var.	..	..	6
514	Gesneria allagophylla	<i>allago-leaved</i>	14	59	97	bsp	sc.	..	7-8	1
515	Gœum chilœense	<i>Chile</i>	12	35	126	hp†	..	1½	7-9	6
516	splendens	<i>splendid</i>	..	..	..	..	..	..	..	6
517	Gilia achilleæfolia	<i>milfoil-leaved</i>	5	25	117	ha	bl.	2	7-8	3
518	capitata	<i>head-(flower)</i>	3
519	— alba	<i>— white</i>	wh.	3

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520	Gilia laciniata	cut (leaved)	pk.	1	..	s.d.	4
521	tricolor*	three-coloured	var.	1½	3
522	— alba	— white (ext.)	..	..	..	wh.	..	..	..	4
523	— — —	No. 517 to 522	..	..	..	div.	..	..	1	6
524	Godetia lepida	pleasing	8	25	24	hha	..	1	..	4
525	rubicunda	purple	..	..	..	pur.	1½	..	..	4
526	vinosa	vinous	..	..	..	rose	1	..	..	4
527	Grindelia sibirica	Siberian	19	54	83	ha	..	..	..	3
528	Gypsophila elegans	elegant	10	26	79	..	w.p.	¾	..	3
529	Helianthemum guttatum	spotted	13	25	80	..	sp.	½	6-8	6
530	Heliophila araboides*	Arabis-like	15	61	86	hha	bl.	¾	..	6
531	pilosa	hairy	..	..	..	..	..	..	..	6
532	Heliotropium peruv.	Peruvian	5	25	74	dsp	..	2	5-9	4
533	Hibiscus africanus	African	16	48	107	hha	var.	..	7-8	3
534	Humboldtii	Humboldt's	..	..	..	..	..	1½	..	6
535	Trionum	(Bl. Ketmia)	..	..	..	..	2	..	..	3
536	vesicarius	bladder (fine)	..	..	..	..	1½	..	..	6
537	— — —	No. 533 to 536	..	..	..	..	..	..	1	3
538	Abelmoschus	(Musk Okro)	..	..	..	ghpt	yel.	2	7-9	6
539	cannabinus	hemp (leaved)	..	..	..	..	w.p.	..	6-9	6
540	ficulneus	fig-leaved	..	..	..	..	wh.	3	7-9	6
541	Manihot	Manihot	..	..	..	..	sul.	..	..	6
542	militaris	military	..	..	..	..	pur.	..	..	6
543	moschatus	musk	..	..	..	..	..	..	6-9	6
544	Patersonii	Paterson's	..	..	..	..	15	..	1	0
545	Richardsoni	Richardson's	..	..	..	..	yel.	3	..	1
546	roseus	roseate	..	..	..	..	rose	..	..	6
547	Sabdariffa	Sabdariffa	..	..	..	..	yel.	..	..	6
548	speciosus	showy	..	..	..	..	sc.	..	..	1
549	esculentus	edible	..	..	..	bsa	yel.	..	6-7	6
550	palustris	marsh	..	..	..	hp	pk.	..	7-8	6
551	— — —	No. 538 to 550	..	..	..	..	..	..	..	5
552	Humea elegans	elegant, 2 var.	19	53	83	hhbt	red	6	6-9	1
553	Iberis coronaria, reginae	Queen's (new)	15	60	86	ha	wh.	1	7-9	1
554	Ipomoea bona-nox**	good-night	5	25	85	gha	..	10	..	1
555	coccinea**	scarlet	..	..	..	..	sc.	6	..	4
556	eriosperma**	woolly-seeded	..	..	..	..	pk.	10	..	1
557	lutea**	yellow	..	..	..	..	yel.	6	..	4
558	pes-tigridis**	tiger-foot	..	..	..	..	red	..	..	1
559	Quamoclit**	Quamoclit	..	..	..	..	sc.	..	..	6
560	hederacea**	ivy (leaved)	..	..	..	hha	bl.	10	..	3
561	Michauxii**	Michaux's	..	..	..	..	sc.	..	..	3
562	montana**	mountain	..	..	..	..	var.	..	..	6
563	trichocarpa**	hairy-podded	..	..	..	..	bl.	..	..	3
564	triloba**	three-lobed	..	..	..	..	..	..	..	3
565	pendula**	pendulous	..	..	..	hhpt	pk.	..	5-9	6
566	sp.**	sp. Norf. Is.	..	..	..	..	..	..	..	1

No.			Lin. Cl.	Lin. Ord.	Nat. Ord.	Hard. and Dur. of Pl.	Col. of Fl.	Ht. in Ft.	M. of Fl.	Pr. per P.
567	— — —	No. 554 to 566	..	..	..				s. d.	
568	<i>Ipomopsis elegans</i>	<i>elegant</i>	..	..	117	hhb†	sc.	2	8-9	5 6
569	<i>Kaulfussia amelloides*</i>	<i>Amellus-like</i>	19	54	83	hha	s. bl.	2	7-9	1 0
570	<i>Lablab vulgaris</i>	<i>common, 2 var.</i>	17	45	102	gha	v. w.	8	..	6
571	<i>Lantana Sellowii</i>	<i>Sellow's</i>	14	59	135	hhp†	pur.	1½	..	3
572	sp. australis	<i>Australian sp.</i>	..	..	..	..	..	..	..	6
573	<i>Lapsana grandiflora</i>	<i>large-flowered</i>	19	53	83	hp	yel.	2½	6-8	1 0
574	<i>Lasthenia californica</i>	<i>Californian</i>	..	54	..	ha	..	3	6-7	6
575	<i>Lathyrus sphaericus</i>	<i>spherical</i>	17	45	102	..	cr.	1	6-8	3
576	<i>Leptosiphon androsaceus</i>	<i>Androsaceus-l.</i>	5	25	..	..	var.	1	..	6
577	densiflorus	<i>thick-flowered</i>	..	..	..	..	..	1	..	6
578	<i>Limnanthes Douglàsii</i>	<i>Douglas's</i>	..	..	..	..	..	1	..	6
579	<i>Linum monogynum</i>	<i>one-styled</i>	..	30	104	hhp†	wh.	2	..	6
580	— — —	<i>4 sp. separate</i>	..	..	..	h	div.	div.	..	1 0
581	<i>Loasa lateritia**</i>	<i>orange-colour</i>	18	48	105	ghp†	or.	8	7-9	1 0
582	tricolor	<i>three-coloured</i>	..	..	..	ha	var.	2	..	3
583	<i>Lobelia cardinalis</i>	<i>Cardinal</i>	5	25	103	ghp	sc.	3	..	6
584	erinoides	<i>Erinus-like</i>	..	..	..	hhb†	bl.	1	6-8	6
585	gracilis	<i>slender</i>	..	..	..	hha	..	1	..	6
586	senecioides	<i>Senecio-like</i>	..	..	..	ghp†	..	..	..	6
587	<i>Lõnas inodora</i>	<i>scentless</i>	19	53	83	ha	yel.	..	..	4
588	<i>Lopezia coronata</i>	<i>crown-flowered</i>	1	25	111	..	red	2½	..	3
589	racemosa	<i>bunch-flowered</i>	..	..	..	hhp†	..	3	..	6
590	<i>Lophospermum scandens</i>	<i>climbing**</i>	14	59	128	ghp†	pur.	10	7-9	6
591	erubescens**	<i>blushing</i>	..	..	..	..	blu.	..	..	6
592	<i>Rhodochiton**</i>	<i>Rhodochiton</i>	..	..	..	..	pur.	..	..	6
593	<i>Lõtus jacobæus</i>	<i>St. James's Isl.</i>	17	45	102	..	blk.	1	..	6
594	<i>Lupinus bicolor</i>	<i>two-coloured</i>	16	..	..	ha	var.	..	..	3
595	hirsutus, albus	<i>(new) white</i>	..	..	..	..	wh.	3	..	3
596	linifolius	<i>flax-leaved</i>	..	..	..	..	bl.	2	..	3
597	micranthus	<i>small-flowered</i>	..	..	..	..	b. b.	1	..	3
598	purpureus	<i>purple</i>	..	..	..	..	pur.	1½	..	3
599	— — —	No. 594 to 598	..	..	..	..	..	..	..	1 0
600	arboreus	<i>tree</i>	..	..	..	hhp†	yel.	4	..	6
601	<i>Douglàsii</i>	<i>Douglas's</i>	..	..	..	..	..	2	..	6
602	grandifolius	<i>large-leaved</i>	..	..	..	..	pur.	3	..	4
603	litoralis	<i>sea-shore</i>	..	..	..	..	b. p.	1	..	4
604	leucophyllus	<i>white-leaved</i>	..	..	..	..	pk.	2	..	6
605	lucidus	<i>shining</i>	..	..	..	..	..	..	..	6
606	<i>Marshallianus</i>	<i>Marshall's</i>	..	..	..	..	div.	4	..	6
607	mexicanus	<i>Mexican</i>	..	..	..	..	bl.	2	..	4
608	Milleri	<i>Miller's</i>	..	..	..	..	..	..	..	4
609	nootkatensis	<i>Nootka-sound</i>	..	..	..	..	pur.	..	..	4
610	ochroleucus	<i>pale yellow</i>	..	..	..	..	yel.	..	..	6
611	ornatus	<i>ornamented</i>	lil.	6
612	perennis	<i>perennial</i>	var.	1½	..	3
613	plumosus	<i>feathery</i>	bl.	2	..	6

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614	Lupinus polyphyllus	many-leaved	3	..	s. d 3
615	— albiflorus	— white var.	wh.	4
616	— rivularis	river-side	2	..	4
617	— albus	— white var.	..	..	..	..	wh.	..	..	4
618	succulentus	succulent	..	..	..	..	..	..	..	4
619	tomentosus	woolly	..	..	..	..	div.	4	..	4
620	tricolor	three-coloured	..	..	..	..	var.	2	..	6
621	versicolor	various col.	..	..	..	..	..	3	..	6
622	— — —	20 peren. var.	..	..	..	..	..	..	..	7 0
623	Luzuriaga cymosa	cymose	6 25	140	ghp	gr.	3	5-6	6	6
624	Lychnis fulgens	shining	10 30	79	hhp	sc.	1	6-9	6	6
625	Bungeana	Bunge's	..	..	..	..	2	..	1 0	3
626	Lysimachia azorea	Azores	5 25	121	hp	..	..	..	..	6
627	verticillata	whorled	..	..	..	..	yel.	1	7-8	6
628	Mardia elegans	elegant	19 54	83	ha	..	3	7-9	3	3
629	Malope trifida	trifid	16 48	107	ha	pur.	2	7-8	3	3
630	— grandiflora	— large-flow.	..	..	..	..	..	..	..	3
631	— alba	— white	..	..	..	..	wh.	..	..	4
632	Malva capensis	Cape	..	..	ghp	sc.	10	year	6	6
633	— elegans	elegant	..	..	..	..	4	5-8	6	6
634	Martynia proboscidea	proboscis-like	14 59	130	hha	bl.	1	7-8	6	6
635	Maurandia Barclayana	Barclay's**	..	129	hhpt	pur.	10	6-9	6	6
636	antirrhiniflora**	snap-drag. flo.	..	..	..	..	..	..	..	6
637	semperflorans**	ever-flowering	..	..	..	b. w.	..	..	6	6
638	Mimulus moschatius	musk	..	..	..	yel.	3	6-9	6	6
639	cardinalis	Cardinal	..	..	..	sc.	2	..	6	6
640	roseus	rose-coloured	..	..	..	..	1	..	6	6
641	quinquevulnerus	five-spotted	..	..	..	sp.	..	..	6	6
642	— coccineus	— scarlet	..	..	..	sc.	..	..	6	6
643	— rivularis	river-side	..	..	..	yel.	..	..	3	3
644	— Smithii	— Smith's	..	..	..	var.	..	..	6	6
645	— Youngi	— Young's	..	..	..	..	..	..	6	6
646	— — —	No. 638 to 646	..	..	..	..	..	..	3 0	6
647	— — —	extra fine m.	..	..	..	..	..	..	6	6
648	Nemophila atomaria	(white) spotted	5 25	100	ha	sp.	3	6-9	6	6
649	aurita	eared	..	..	..	bl.	2 1/2	..	4	4
650	insignis	beautiful	..	..	..	..	1 1/2	..	4	4
651	— grandiflora	— large-flow.	..	..	..	..	..	..	4	4
652	phacelioides	Phacelia-like	..	..	..	..	..	..	6	6
653	Nemesis floribunda	bunch-flowered	14 59	129	hha	var.	1	..	6	6
654	Nolana prostrata	trailing	5 25	131	ha	l. b.	tr.	7-9	3	3
655	atriplexifolia	Atroplex-leaved	..	..	..	..	1	..	4	4
656	paradoxa	paradoxical	..	..	..	bl.	1	..	3	3
657	Nonea rosea	rose-coloured	..	74	..	pk.	1 1/2	6-7	6	6
658	Nothochlæna Marantæ	Maranta's	24 fe.	3	ghp	br.	3	6-8	1 0	10
659	Oenothera bifrons	two-faced	8 25	111	hha	p. c.	1	..	3	3
660	densiflora	thick-flowered	4	4

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661	<i>Oenothera Drummondii</i>	<i>Drummond's</i>	yel.	6	
662	longiflora	long-flowered	hbb†	pur.	1½	..	4	
663	rosea	rose-coloured	..	..	..	pt	rose	1	..	3	
664	rosea-alba	rose and white	..	..	..	a	r. w.	..	..	3	
665	taraxacifolia	Dandelion-ld.	..	..	..	hhp	yel.	½	..	6	
666	undulata	waved	..	..	..	ha	..	2	..	3	
667	— — —	16 sp. separate	..	..	..	..	..	..	..	4	0
668	<i>Onopordum illyricum</i>	Illyrian	19	53	83	hb	pur.	6	7-8	6	
669	heterocanthum	various-spined	..	..	..	..	..	..	..	6	
670	<i>Pæony</i> , pl. sp.	sev. var. mixed	13	26	123	hp	div.	..	..	6	
671	<i>Papaver nudicaule</i>	naked-stalked	..	25	114	hhp	var.	1½	..	4	
672	orientale	oriental	..	..	..	..	red	3	..	4	
673	pulcherrimum	most beautiful	..	..	..	..	sc.	4	..	6	
674	<i>Pavonia Tigridia</i>	(Tiger-flower)	16	38	145	..	st.	1	7-9	6	
675	<i>Passiflora cœrulea</i> **	blue-flowered	..	40	115	..	bl.	30	6-9	6	
676	<i>adiantifolia</i> **	maiden-hair l.	..	..	..	ghp	or.	20	1-8	1	0
677	sp. albiflora**	white fld. spec.	..	..	..	..	wh.	12	6-9	1	0
678	<i>Pelargonium</i> (Geranium)	(finest mixed)	..	42	96	..	div.	3	5-9	1	0
679	— coccineum	scarlet	..	..	..	..	sc.	..	..	6	
680	<i>Pentstemon atrorubens</i>	dark red	14	59	129	hhp	red	2	7-9	6	
681	atropurpureus	dark purple	..	..	..	..	pur.	..	..	6	
682	campanulatus	bell-flowered	..	..	..	..	..	..	5-9	6	
683	digitalis	foxglove fld.	..	..	..	..	wh.	..	7-9	6	
684	gentianoides	Gentian-like	..	..	..	..	red	..	..	1	0
685	glandulosus	glandular	..	..	..	..	..	..	..	6	
686	pulchellus	pretty	..	..	..	..	bl.	..	..	6	
687	roseus	rose-coloured	..	..	..	..	rose	..	..	6	
688	speciosus	showy	..	..	..	..	bl.	..	..	1	0
689	— — —	No. 680 to 688	..	..	..	..	div.	..	..	4	0
690	— — —	fine mixed	..	..	..	..	..	..	..	6	
691	<i>Petunia phœnicea</i>	purple	5	25	131	hhp†	pur.	3	6-9	6	
692	nyctaginiflora	(white-flow.)	..	..	..	..	wh.	..	..	3	
693	violæcea	violet	..	..	..	..	vio.	..	..	6	
694	hybrida	(finest hybrid)	..	..	..	..	div.	..	..	1	0
695	— — —	No. 691 to 694	..	..	..	..	..	..	..	2	0
696	<i>Phacelia bipinnatifida</i>	bipinnatifid	..	..	100	ha	bl.	2	7-8	6	
697	<i>Platystemon californica</i>	Californian	..	..	..	..	..	..	..	6	
698	<i>Phlox Drummondii</i>	Drummond's	5	25	117	hha	div.	2	6-9	1	0
699	— var. atrorubens	— dark red	..	..	..	..	cr.	..	..	1	0
700	<i>Podolepis gracilis</i>	slender, 2 var.	19	54	83	..	p. w.	..	7-8	6	
701	<i>Potentilla formosa</i>	beautiful	12	35	126	hhp	pur.	1½	..	4	
702	atrosanguinea	dark-red	..	..	..	..	red	1	..	4	
703	hirta	hairy	..	..	..	..	yel.	..	..	3	
704	pedata	pedate	..	..	..	..	..	..	..	4	
705	Thomasi	Thomas's	..	..	..	..	..	..	..	6	
706	<i>Portulaca Gilliesii</i>	Gillies'	11	2	120	fp	sc.	½	..	6	
707	grandiflora	large flowered	..	..	..	..	y. p.	..	..	6	

No.		Lin. Cl.	Lin. Ord.	Nat. Ord.	Hard. and Dur. of Fl.	Col. of Fl.	Ht. in Ft.	M. of Fl.	Pr. per P.
708	<i>Primula cortusoides</i>								
709	— <i>prænitens</i>								
710	— <i>alba</i>								
711	— <i>fimbriata</i>								
712	<i>Pyræthrum corymbosum</i>								
713	<i>Rhodanthe Manglesii</i>								
714	<i>Ribes Dikuscha</i>								
715	<i>Rudbeckia amplexicaulis</i>								
716	<i>Salpiglossis picta</i>								
717	— <i>atropurpurea</i>								
718	— <i>Barclayana</i>								
719	— <i>intermedia</i>								
720	— — —								
721	<i>Saponaria calabrica</i>								
722	<i>Salvia aurea</i>								
723	— <i>bicolor</i>								
724	— <i>ceratophylla</i>								
725	<i>Salvia limbatata</i>								
726	— <i>Tenorii</i>								
727	<i>Sanvitalia procumbens</i>								
728	<i>Schizanthus Grahami</i>								
729	— <i>pinnatus</i>								
730	— <i>humilis*</i>								
731	— <i>diffusus</i>								
732	— <i>Priestii</i>								
733	— <i>venustus</i>								
734	— <i>porrigens</i>								
735	— <i>retusus</i>								
736	<i>Schizopetalon Walkeri</i>								
737	<i>Silene pendula*</i>								
738	<i>Sphærogyne speciosa</i>								
739	<i>Stenactis speciosa</i>								
740	<i>Stevia serrata</i>								
741	<i>Streptocarpus Rexii</i>								
742	<i>Tacsônia pinnatifidula</i>								
743	<i>Thunbergia alata</i>								
744	— <i>alba</i>								
745	<i>Tithonia, 4 sp.</i>								
746	<i>Trachelium cœruleum</i>								
747	<i>Trachymene cœrulea</i>								
748	<i>Tropœolum brachyceras</i>								
749	— <i>pentaphyllum</i>								
750	— <i>peregrinum</i>								
751	— <i>tricolorum</i>								
752	<i>Verbascum formosum</i>								
753	<i>Verbena Aubletia</i>								

s.d.

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No.			Lin. Cl.	Lin. Ord.	Nat. Ord.	Hard and Dur. of Pl.	Col. of Fl.	Ht. in Ft.	M. of Fl.	Pr. per P.	s. d.
754	Verbena Arraneana	Earl of Arran's	pur.	1	0
755	hastata	hastate	..	..	..	hp	vio.	3	..	..	3
756	incisa	cut-(leaved)	..	..	..	hlp†	bl.	1½	..	..	6
757	pulchella	pretty	..	..	..	..	pur.	..	..	..	6
758	Tweediàna	Mr. Tweedie's	..	..	..	..	sc.	..	..	..	6
759	venosa	veiny	..	..	..	..	rose	..	..	..	6
760	Vinca rosea et var. alba	rose and white	5	25	66	ghp	r. w.	1	4-8	6	6
761	Viola bicolor	two-coloured	17	45	102	hp†	var.	½	6-7	6	6
762	altaica	Altaic	..	..	..	..	..	½	4-6	6	6
763	odorata	sweet-scented	..	..	..	..	div.	1	6-7	6	6
764	Zinnia verticillata	whorled	19	54	83	hha	sc.	2	7-9	3	3
765	ambigua	ambiguous	..	..	..	..	red	..	..	..	3
766	elegans	elegant	..	..	..	..	vio.	..	..	..	4
767	— alba	— white	..	..	..	..	wh.	..	..	..	6
768	— coccinea	— scarlet	..	..	..	..	sc.	..	..	..	6
769	— miniata	— carmine	..	..	..	..	car.	..	..	..	6
770	— purpurea	— purple	..	..	..	..	pur.	..	..	..	6
771	— rosea	— rose	..	..	..	..	rose	..	..	..	6
772	— — —	splendid mixed	..	..	..	..	div.	..	..	1	0

FLOWER ROOTS

to be planted in March or April.

	s. d.
Anemones, finest new, mixed	4 0 doz.
very fine double	16 0 lb.
finest single	4 0 ..
apennine	3 6 doz.
Gladiolus floribundus	12 0 ..
psittacinus	2 6 ..
Pavonia Tigridia, large	2 6 ..
Ranunculus, fine mixed	5 0 100
black turban	1 6 doz.
Italian —	1 6 ..
orange —	1 6 ..
scarlet —	0 6 ..
yellow —	0 9 ..
white (new) —	7 6 ..
Tuberoses, double Italian	3 6 ..

CAPE BULBS,

proper for the Greenhouse.

	s. d.	ea.
Amaryllis speciosa	3 6	ea.
Brunsvigia Josephinae	21 0	..
falcata, large 5s., small	3 6	..
sp. nova	5 0	..
Hæmanthus tigrinus	3 0	..
coccineus, extra large	5 0	..

PLANTS

for the open ground.

Finest new Heartsease,	
named	20 0 doz.
Very fine ditto, ditto	10 0 ..
Ex. fine Pinks, 12 pair, named	10 0 ..

EXOTIC GREENHOUSE SEEDS.

	Price per Packet.		Price per Packet.
	s. d.		s. d.
773 <i>Acacia armata</i>	0 6	807 <i>Liparia villosa</i>	0 6
774 6 fine species	1 0	808 <i>Mesembryan. aequilaterale</i>	0 6
775 <i>Alyxia Forsterii</i>	0 6	809 <i>Mundia spinosa</i>	0 6
776 <i>Bignonia</i> sp. Norfolk Island	1 0	810 <i>Mydoporum laetum</i>	0 6
777 <i>Blackburnia pinnata</i> N. I.	1 0	811 <i>Myrsine coriacea</i>	0 6
778 <i>rutacea</i>	1 0	812 <i>Notelaea longifolia</i>	0 6
779 <i>Chironia linoides</i>	0 6	813 <i>Othonna atbanasii</i>	0 6
780 <i>Chorizema rhombea</i>	1 0	814 <i>Osteospermum</i> sp.	0 6
781 <i>ilicifolia</i>	0 6	815 <i>Phormium tenax</i> , New Z.	
782 <i>Capparis</i> species	0 6	Flax	1 6
783 <i>Coprosma lucida</i>	1 0	816 <i>Phytica</i> , 3 sp.	1 0
784 <i>Croton</i> sp. Norfolk Island	0 6	817 <i>Pimelea decussata</i>	1 6
785 <i>Dianella</i> , 2 sp.	0 6	818 4 species	1 0
786 <i>Dracena australis</i>	1 0	819 <i>Pittosporum</i> , 2 sp.	0 6
787 <i>Elaeodendrum australe</i>	1 0	820 <i>Platylöbium</i> , sp.	1 0
788 <i>Elaeocarpus cyaneus</i>	0 6	821 <i>Podalyria sericea</i>	1 0
789 <i>Epacris</i> , sev. species	1 0	822 <i>styracifolia</i>	0 6
790 <i>Erica</i> , 20 sp.	2 6	823 <i>Polygala Heisteria</i>	0 6
791 <i>Genista rhodospora</i>	0 6	824 <i>myrtifolia</i>	0 6
792 <i>Freyinetia haveriana</i> ?	0 6	825 <i>Protea decumbens</i>	1 0
793 <i>Gloxinia speciosa</i>	0 6	826 <i>hirta</i>	1 0
794 <i>caulescens</i>	0 6	827 <i>melifera</i>	1 0
795 <i>Gnaphalium eximium</i>	1 0	828 <i>neriifolia</i>	1 0
796 <i>Goodia pubescens</i>	0 6	829 <i>scölymus</i>	1 0
797 <i>Hedysarum</i> , 4 sp.	1 0	830 <i>speciosa</i>	1 0
798 <i>Indigofera australis</i>	1 0	831 No. 825 to 830 inclusive	5 0
799 <i>amena</i>	0 6	832 <i>Psidium pomiferum</i>	0 6
800 <i>cytisoides</i>	1 0	833 <i>Sciadophyllum</i> , sp.	1 6
801 <i>ornata</i>	0 6	834 <i>Trichilia</i> , sp.	0 6
802 <i>Hypericum</i> sp. ex. Capensis	0 6	835 <i>Tylöphora</i> , sp.	1 0
803 <i>Kennedia monophylla</i>	1 0	836 <i>Ungeria</i> , sp.	0 6
804 <i>rubicunda</i>	0 6	837 <i>Virgilia</i> , sp. <i>grandiflora</i>	1 0
805 <i>Leucodendron argenteum</i>	0 6	838 <i>Wistaria</i> , sp. Philip Island	1 6
806 <i>concolor</i>	0 6	839 <i>Zieria</i> , sp.	1 0

